AMERICAN Railroad Journal.

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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 36.] NEW YORK, SEPTEMBER 16, 1882. [WHOLE No. 2,421.—VOL. L.

ORGANIZATION.

THE directors of the Pullman Palace Car Company, elected on the 7th inst., are: Geo. M. Pullman, Chas. G. Hammond, Jno. Crerar, Marshall Field, J. W. Doane, Norman Williams and Henry C. Hulbert.

THE stockholders of the North Beach and Mission Railroad Company, at their annual meeting in San Francisco, Cal., on the 29th ult., elected the following directors: J. C. Wilmerding, J. T. Boyd, Jerome Sinclair, William Alvord, H. D. Cogswell, M. S. Kelly, Carl Appel and Albert Meyer.

THE directors of the Massawippi Valley Railroad Company elected at a meeting of the stockholders held at Rock Island, P. Q., on the 6th inst., are: Emmons Raymond, R. N. Hall, W. K. Blodgett, S. Foster, F. A. Peters, W. White, C. W. Pierce, W. S. Foster, C. H. Kathan. R. N. Hall was elected president; S. Foster, vice-president; W. S. Foster, secretary and treasurer, and E. Cleveland, clerk.

AT the annual meeting of the stockholders of the Connecticut and Passumpsic Rivers Railroad Company, held at the Memphremagog House, Newport, Vt., on the 7th inst., the following directors were elected: Emmons Raymond, W. K. Blodgett, Amos Barnes, Alden Speare, Stephen Foster, F. A. Peters, S. S. Thompson, Charles W. Pierce and T. P. Redfield. At a subsequent meeting of the directors Emmons Raymond was chosen president, W. K. Blodgett, vice-president; H. E. Folsom, superintendent.

AT a special meeting of the board of directors of the Hannibal and St. Joseph Railroad Company, held in this city on the 12th inst., Jay Gould, Russell Sage, Sidney Dillon and Frederick L. Ames, of Boston, were elected directors in place of Horace Porter, John Bloodgood, Austin G. Gorham and John R. Duff, resigned. These changes are in accordance with the passage of the control of the Hannibal and St. Joseph Railroad into the hands of Mr. Gould and his friends through the recent sale of Mr. Duff's common stock to them.

AT a meeting of the stockholders of the Connecticut Valley Railroad Company, held at Hartford, Conn., on the 12th inst., the following board of directors was elected: George H. Watrous and E. H. Trowbridge of New Haven; Henry C. Robinson and C. M. Pond, of Hartford; and William D. Bishop and Nathaniel Wheeler, of Bridgeport—all directors of the New York, New Haven and Hartford Railroad Company, to which the road has been transferred; and Samuel Babcock, of Middletown; D. C. Spencer, of Saybrook; and R. D. Hubbard, of Hartford, who were of the old board of directors of the Connecticut Valley Railroad.

AT the annual meeting of the stockholders of the Texas and Pacific Railway Company, held in this city on the 12th inst., the following gentlemen were elected directors for the ensuing year: Jay Gould, W. T. Walters, Russell Sage, James P. Scott, W. C. Hall, T. S. Bond, Charles O. Baird, Fred. L. Ames, J. C. Brown, H. M. Hoxie, R. S. Hays, T. T. Eckert, A. L. Hopkins, E. H. Perkins, Jr., E. B. Wheelock, D. Tilsenheld and George J. Gould. The directors then elected the following officers: President, Jay Gould; first vice-president, R. S. Hays; second vice-president, John C. Brown; third vice-president, H. M. Hoxie; secretary and treasurer, C. E. Satterlee.

CONSTRUCTION.

A NEW railroad is proposed in Ohio to run from Norwalk through Milan, connecting with Sandusky.

SURVEYS are in progress for the proposed extension of the Delaware and Hudson Railroad from Honesdale to Rondout.

THE Montreal, Portland and Boston Railway is now completed from West Farnham, Que., to East Franklin, Vt., and will soon be completed to Sheldon.

THE Genesee Valley Canal Railroad (Buffalo, New York and Philadelphia) will be completed on the 16th inst., when the directors will make an inspection trip over it.

THE Pennsylvania Railroad Company have completed the survey of one route for the proposed new road to Phœnixville and Reading. Three routes will be surveyed.

THE line of the New York, Lackawanna and Western Railway has been completed to Buffalo, and trains were run over it to that point for the first time on the 11th inst.

A FAVORABLE pass has been discovered for carrying the Canadian Pacific route through the Selkirk range of British Columbia. Millions of dollars, it is said, will be saved by this route.

THE Mexican Transatlantic Steamship Company has signed a contract in London for the construction of six first-class steamers, to be built on the Clyde, and to cost $700,000 each. They are to run between English and Italian ports and Vera Cruz. They will commence running within one year.

ROSEBURG, Oregon, is no longer the terminus of the Oregon and California Railroad. Trains now run through Roseburg to Myrtle Creek. Grading is completed on the extension for eight miles south of Roseburg.

THE officers of the Indiana, Bloomington and Western Railway have contracted with the Massillon Bridge Company for the construction of a composition bridge 400 feet long, over the Scioto River at Columbus.

ANOTHER cargo of steel rails has arrived at Quebec for the Lake St. John Railway, to be laid past St. Raymond, and an order for a bridge to cross the river there has been given to Clark, Reeves & Co., of Philadelphia.

THE New York and New England Railroad Company are constructing 1,600 feet of side track at Parkville, 1,600 feet at Cedar Oak Park, and the same amount at Clayton; also three-quarters of a mile at Plainville and a quarter of a mile at New Britain.

THE Harford (Md.) *Democrat* says it is reported that the managers of the Maryland Central Railroad have contracted for laying the track of the railroad from the Great Gunpowder, a distance of eight miles, the work to be done in seven weeks from date.

THE Coshocton and Straitsville extension of the Connotton Valley Railroad is now completed to the Cleveland, Tuscarawas Valley and Wheeling Railroad crossing, eighteen miles south of Canton. The work will progress southward as fast as money and men will permit.

FORTY prominent citizens of Chicago started from that city on the 11th inst., to examine the Mexican Central Railway at its opening from Paso del Norte (opposite El Paso, Texas), to Chihuahua; among the number were L. Z. Leitar, P. D. Arman, S. A. Kent and W. K. Sullivan.

TRACK on the Buffalo extension of the Buffalo, Pittsburgh and Western Railway has been laid into Buffalo to a connection with the Buffalo, New York and Philadelphia Railroad. The Salamanca division is finished to a point five miles from Salamanca, and the entire road is graded.

THE Utah division of the Denver and Rio Grande Railway was completed on the 9th inst.

to Montrose, on the Uncompahgre River, 252 miles from Denver. The link necessary to connect the Colorado and Utah systems is now reduced to 275 miles, for which distance work will be vigorously prosecuted.

THE Chatham (Canada) *Tribune* says that the Erie and Huron Railway will be completed from Blenheim to Wallaceburg and rolling-stock put upon it by the first of the year, providing a bonus or about $50,000 of $60,000 can be guaranteed by the different municipalities, to be paid at completion of the road."

THE Alexandria (Va,) *Gazette* states that the contract for building the Washington and Western Railroad from its present terminus, Round Hill, to Winchester, will be given out this week. There is, it is said, now no doubt that the road will be pushed ahead as fast as possible to its final terminus, the Ohio River.

IT is said that the Columbus and Eastern Railroad will be put under contract from Columbus to Selby's Pass in a short time. This, the Ohio *State Journal* says, will no doubt prove to be one of the most profitable mineral roads in the country. It will strike the coal fields at a shorter distance from Columbus than any other line.

THE California Southern road has been completed from National City, on San Diego Bay, northward to a connection with the Southern Pacific Railroad at Colton, 129 miles. This gives San Diego a railroad outlet for the first time. The distance by rail from the San Diego Bay terminus to Los Angeles is 187 miles, and to San Francisco 669 miles.

THE Quebec and Ontario Railway is being rapidly pushed onward, and it is confidently expected will be completed by this time next year, or perhaps a little later in that season. It will then be a matter of eight or nine hours between Montreal and Toronto, and the line will be a competitor with the Grand Trunk Railway for business West.

THE first regular track-laying on the new Pemigewasset Valley Railroad began at Plymouth, N. H., on the 11th inst., at the junction with the Boston, Concord and Montreal Railroad. Robert Caldwell, of Sheldon, Vt., is the contractor. The 20 miles to be laid to Woodstock will be finished about November 1. Nearly all the grading, bridges, etc. are now done.

THE first sod of the Selkirk branch of the Canadian Pacific Railway was turned on the 7th inst., at the town of Selkirk. The contractors are John Rowell & Co. The branch is 22 miles long, and has to be ready by the 1st of November for the track-layers. Hopes are entertained that this may yet be the link of opening up a great commercial highway to Europe by the Hudson's Bay route.

THE people of Prince Albert, Manitoba, determined to have a railway, have granted the Qu'Appelle, Saskatchewan Valley and Peace River Railway Company a land bonus, which at the present state of the real estate market is equal to $500,000. Operations are to commence on both ends of the line next spring, when the company will take an engine and rails to Prince Albert by the boats. The company are bound to have the line in running order from Prince Albert to the south branch of the Saskatchewan by the fall of 1883.

THE "Pennsylvania and Western" is to be the name of railroad to be constructed from a junction with the Jersey Shore, Pine Creek and Buffalo Railroad, along Beech Creek, in Clinton county, to Clearfield county, and unite with the Vanderbilt Southwestern Railroad, which has been surveyed in that direction from Pittsburgh. It is understood that the new road will tap valuable coal lands.

THE Pennsylvania Railroad Company has placed under contract a line of road from Frazers to Phœnixville. It runs from Louella station (formerly Wayne) to Conshohocken, and thence by the east side of the Schuykill to Phœnixville via Norristown. This plan, it is said, will take the place of the line from Philadelphia to Norristown via Chestnut Hill; the cost of the tunnel at the latter place and the building of an extensive bridge across the Wissahickon being reasons assigned for the abandonment of this road.

THE grading on the Kansas City, Springfield and Memphis Railroad will be finished in about six weeks as far as Walnut Ridge, Ark., 160 miles from Springfield, and a few miles east of the junction with the St. Louis, Iron Mountain and Southern Railway. Track-laying will recommence at Loveland, the present eastern terminus of the road, forty-four miles from Springfield, when the work will be pushed much more rapidly than during the summer. At the western end of the Springfield division of the road they are relaying portions of the track by substituting steel rails for iron ones. When this work is completed the road will be an all steel one, with, consequently, much easier running. On the Parsons Branch, which runs from Cherokee to Cherryvale, Kan., the track will be changed from narrow to standard gauge. It is thought that Memphis will be reached by June 1.

THE track of the Mexican National Railway reached 150 kilometres from the City of Mexico to the Pacific, by way of Toluca, on the 7th inst. This is the 93d mile-post out from the City of Mexico; and accepted track to this point entitles the company at once to the subventions on all accepted road built up to date, under the main concession. The number of miles built to date under this concession amounts to 270, and the subventions to $2,911,460. The subventions will hereafter be earned and payable as each successive section of 25 kilometres (16¼ miles) is constructed and accepted. The company have completed more than the 400 kilometres stipulated to be built in two years—which term does not expire until Oct. 14th. This fact will be communicated by President Gonzales in his annual message to the Mexican Congress which convenes on the date of this issue. The company has built so far under this concession 502 miles. of which 179 miles are in Texas.

THE Lehigh and Hudson River Railroad, over which a "tour of inspection" was made on the 7th inst., as noted elsewhere in this issue, is the first railroad built through the entire length of the picturesque Kittatining Valley between the Delaware and Hudson rivers. Leaving Belvidere, on the first-named river, it crosses Warren and Sussex counties of New Jersey, and then Orange county, New York, over the Wallkill Valley line to Newburgh, running parallel to the mountain ranges on either side of it, and following the courses of the Pequest and Wallkill, which rise together in Sussex county and flow in opposite directions to the North and South rivers (as they are laid down on the early maps). The road is remarkable for its directness of alignment and lightness of grade, although the general surface of the valley is highly diversified. Having its terminus on the Hudson River (opposite Fishkill) the southern terminus of the New York and New England Railroad, all northern New England will be furnished with a direct line of transportation for the coal fields of Pennsylvania.

The New Tay Bridge.

PLANS for the new Tay Bridge are on exhibition in Edinburgh for inspection by intending contractors. The new bridge is to be built on the girder principle, four brick arches next the shore on the side, each having a span of 50 feet; the girder work commencing with a span of 118 feet from center to center of the piers, is continued with ten spans of 129 feet and thirteen spans of 145 feet; this reaches the navigable portion of the channel. Here are eleven spans of 245 feet and two spans of 227 feet; the first four of these spans are 77 feet above high water. From this point the bridge falls at a gradient of one in 114, there being one span of 162 feet, ten of 129 feet 6 inches and one of 127 feet 6 inches. The bridge is to be constructed for a double line of rails; foundation will be formed of wrought iron cylinders filled with concrete, with brick work 8 feet above high water mark. Two piers are then formed of wrought iron pillars, braced together, connected with each other near the top; the platform of the bridge is of wrought iron.

Steam Plough.

A TRIAL of the Stephenson Steam Plough was recently had on a farm near Winnipeg, Manitoba, in the presence of a large number of spectators. As described by the *Times* of that city, the plough weighs about seven tons, is worked by two engines of twenty-horse power but geared back so as to exert a force of forty-horse power on the driving-wheels, which are five feet in diameter, have a tire or face of three and a half feet, and are armed with about five hundred short, pyramid-shaped spikes, so as to enable this broad surface to secure a firm grip of the prairie for traction. The guiding wheels, which are placed together in front, are three feet in diameter, with two and a half feet tire. A particular feature of this machine, and which forms part of the patent, is an improved fan (the invention of Mr. Stephenson), which supplies a powerful blast under the fire-box, to enable it to burn grass or straw. During the trial green grass, which had been mown but an hour or two before, burnt with a fierce flame. The machine draws a frame in which are fixed ten ploughs, each of a fourteen and a half inch cut, and can turn over thirty acres a day. The *Times* states that the trial was a complete success.

Journal of Railroad Law.

SUPREME COURT OF PENNSYLVANIA.

THE PHILADELPHIA AND READING R. R. CO. v. TROUTMAN.

Negligence—Railway Company—Foot-path across defendant's track—Contributory negligence.

ERROR to the Court of Common Pleas of Berks county.

Case by Alice Troutman by her next friend, Samuel Shoup, against the Philadelphia and Reading Railroad Company.

The facts were briefly these: Alice Troutman was at the time of the accident a girl twelve and a half years of age. She lived as a hired servant in the family of John Shoup, at Sheridan, north of the railroad, which at that place runs east and west. On the day of the accident she was sent by Mrs. Shoup for some groceries on the other side of the railroad. She did not attempt to cross the railroad at the public crossing. There is a foot-path used by the furnace hands across the railroad, 106 feet from the public crossing. The girl stepped upon the track, about ten feet away from this foot-path. The northernmost track, and the one upon which the girl entered, is known as the Kauffman siding. Between that and the main road is another track. When the girl stepped upon the Kauffman siding, the employés of the company were engaged in running six six-wheeled cars, loaded with stones, into the Kauffman siding. It was done by means of a flying switch. An engine, with the six cars attached, was run along the main track, and at a distance of half a mile to three-quarters the engine was cut loose from the cars. After the engine had passed the switch, 159 feet from the foot-path, the conductor jumped off and turned the switch, and the engine continued on down the main track, and the cars ran down on the Kauffman siding. The girl got on the track of the Kauffman siding while the cars were still on the main track. While the engine was coming along on the main track, she stood on the siding looking at the engine until it stopped at and over the foot-path. She then walked along the siding to go around the engine, and, while so walking, the cars, loaded with stone, came along the Kauffman siding and struck the girl, and ran over her arm, injuring it so severely as to necessitate its amputation.

Verdict for plaintiff for $1150, and judgment thereon.

Defendant submitted, *inter alia*, the following points:—

2. There is no evidence of negligence in this case on the part of the defendant.

Ans. We fail to discover any direct and positive evidence of negligence, except such as may be inferred from all the evidence.

4. The plaintiff in this case was a trespasser, and therefore guilty of contributory negligence, and the verdict must be for the defendant.

Ans. The plaintiff was a trespasser, but if the defendant suffered such repetitions of trespass, which led the child over the path crossing the fact of her being there would negative the liability incurred by the negligence of her fault.

The refusal to affirm these points was, *inter alia*, assigned for error.

Opinion by GORDON, J. April 10, 1882.

Whilst there were many exceptions taken to the charge and ruling of the court below, the substance of them all may be considered in the disposition of the defendants' second and fourth points. These points were: 2. "That there was no evidence of negligence in the case on part of the defendants." 4. "The plaintiff was a trespasser, and therefore guilty of contributory negligence." Both these points were refused. The case turns mainly upon the last recited or fourth point. The place where the accident occurred was not in the open country, but in a small village of about fifty houses. On the north side of the railroad were a furnace and four or five dwellings; on the south, the depot, a hotel, store, &c. At this point, 106 feet from the public road crossing, there was an old and well-used foot-path leading over the railroad, and it was while attempting to cross by this path that the plaintiff, a child of twelve years of age, was injured.

The court below thought that a person using this path to pass over the defendants' tracks could not be regarded as a trespasser. We can discover nothing wrong in this conclusion. If this was a common and well known foot-path, used by the public for many years, it must certainly have been well known to the employés and officers of this company, and if without let or hindrance the use of it was permitted to persons desiring to cross and re-cross the roadway, we cannot see how one thus using it could be treated as a trespasser. Certainly if a private person had so permitted his land to be used, an action of trespass by him against one passing over it, without previous notice or prohibition, would meet with little favor. But we cannot, in this respect, clothe corporations with power superior to those of natural persons. Indeed, if we regard the case of the Pennsylvania Railroad Company v. Lewis as authority, even a trespasser has some rights which a railroad company is bound to respect, *a fortiori* as to a person who is on the roadway by permission. To hold otherwise would be but a poor comment upon our civilization and upon the wisdom of this court.

As to the negligence of the employés having charge of the cars by which the injury complained of was done, there can be, from the evidence, no doubt. A more perfect trap for the destruction of any one, more especially for a child of tender years and weak intellect, could scarcely have been devised. The train designed for the flying switch is cut from the engine some three-quarters of a mile from, and out of sight of, the crossing; the locomotive is run forward and stationed directly across the foot-path; the train comes down the track at a rapid rate, and when within 159 feet of the place where the child stood, by some slight of hand, unknown to persons not skilled in the management of railroads, and without warning of any kind, it is suddenly turned on to the switch. When, in addition to this, we understand that the hands upon and about this train paid no attention whatever to the track upon which it was running, and that the engineer actually saw the child in the act of approaching, and did nothing to warn her of the coming danger, we cannot understand how any one can have the face to say that there was no negligence on part of those having charge of this train, or, indeed, that they were not guilty of very gross negligence. As to the plaintiff's contributory negligence, we can find no evidence of it; certainly not of that conclusive kind which would require the court to take the question from the jury. The plaintiff herself testifies as follows: "When I got to the path I walked down toward the road; when I came to the track in the path, I stopped, then the engine came down; I went a piece down toward the road, and looked up and down the road and saw nothing but the engine; I think I took three steps; I was on the first track and the engine on the third track; when I got to the track or path, the engine was coming down on the third track, about fifty or sixty feet away; then I stood still until the engine stopped; then I walked down the engine about three paces to walk around the engine; I know that the engine stood on the path; but how much of the engine stood on the path I don't know." It is true that John North, an engineer of the company defendant, but not the one having charge of the engine then on duty, says he saw her when she first stepped on the siding, and that she remained upon it two or three minutes before she was struck. But in this there is no material contradiction of her testimony. In events of this kind, time is at best but a mere matter of guess work, and she was as likely to be correct as he. Be this, however, as it may, it is no serious reflection on the prudence of a child of her age, that she waited and watched until the locomotive had stopped, and until, so far as she could see, the track was entirely clear, even though standing upon the siding. To an ordinary observer, not aware that the flying switch movement was about to be executed, her position was one of no danger. North says: "If the conductor had not turned the switch, the girl would not have been hurt." Doubtless he, with all his skill in railway management, did not think she was in danger; otherwise, we can hardly understand why he did not attempt her rescue. Even had she seen the train moving upon the main track, how could she know that it would not continue on that track? How could this child tell that, by a single motion of a lever, the cars would be upon her within a space measured by some ten or fifteen seconds? This would be too much to ask of a grown person, much more of one of such tender years.

The charge of the learned judge of the court below, when considered as a whole, and not dislocated, as we find it in the assignments, is a fair one, and as favorable to the defendants as it had reason to expect; therefore, without further discussion, we refuse to sustain the exceptions to it.

The judgment is affirmed.

Jeff. Snyder and George F. Bær, Esqs., for plaintiff in error.

W. H. Livingood, Esq., for defendants in error.

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RAILROAD ERA IN MEXICO.

IT is only two years since the Republic of Mexico signalized its purpose to make an effort to keep pace with the civilized world, by encouraging a system of steam roads, and to-day she has a thousand miles more of road than then. The only considerable line in that country prior to this new departure was the road from Vera Cruz harbor inland to the Capital, and it was built by English capital at a great outlay. The example of the United States inspired the Governments of Presidents DIAZ and his successor GONZALES, to have some railroads built for military and commercial purposes. The presence of Mr. JAMES SULLIVAN, an American contractor, and J. SYMON, a speculator, was opportune, and they found little difficulty in persuading the authorities, legislative and executive, federal and State, to adopt the plan of granting money subsidies in much the same way as was tried with the original United States Pacific Railroad. Each of these men was given concessions; the latter for a road from the Capital north to El Paso 1,250 miles, where it should connect with the converging roads in the United States, and with branch lines to both the Atlantic and Pacific coasts. This grant was readily transferred to the Boston capitalists holding the line through Kansas and Colorado to El Paso, and it is now known as the Mexican Central. It has completed (including purchases) 260 miles to Leon, at the southern end, and 240 at the northern end, and is ambitious to close the gap of 750 miles by the end of 1883. It receives a subsidy of 15,000 silver dollars per mile or its equivalent in Custom House scrip. According to the announcements of its president it is to cost some $28,000 per mile average—this, however, is in stocks and bonds.

There have been other concessions granted in Mexico, some with subsidy and some without; among the aided lines one to Mr. DE GRESS, from Laredo to the City of Mexico along the Gulf coast, which is reported to have passed into the hands of JAY GOULD. But little progress is making with any of them, that under GEN. GRANT like the rest doing nothing. The principal competitor of the Central line is the Palmer-Sullivan route—now known as the Mexican National—at the head of which is Gen. W. J. PALMER, also of the Denver and Rio Grande, and formerly of the Kansas Pacific road. He is a sanguine, enterprising leader, and has, like the first-mentioned company, commenced at both ends, and has just completed 140 miles to Morelos and Toluca, and expects to complete 60 miles further to Maravatio within the present month of September. At the Rio Grande frontier he has also completed 140 miles to Monterey, and by purchase in part has obtained a gulf terminus at Corpus Christi, Texas, 160 miles east of the Laredo terminus proper. Being a narrow (3 feet) gauge, the subsidy is only $10,000 per mile, but as rails and machinery are admitted duty free this goes far toward paying the whole cost. This system embraces also some branch and side lines to the Pacific and Atlantic coast ports, and covers in all about 1,600 miles.

The National is however the shorter of the two trunk lines connecting Laredo with the Capital, via San Louis Potosi, being about 800 miles; as 340 are built or nearly so, it leaves less than 500 miles gap to be closed. Inasmuch as the subsidy nearly pays for the track, and it is claimed bonds have been negotiated in London sufficient for the equipment, the work is being pressed forward with great vigor at both ends.

It will be interesting to watch the efforts of these two competitors to see which first effects an unbroken line to the Aztec capital; and it is not doubted, apparently, that there will be business enough for both. The Mexican Central labors under the temporary disadvantage that it leads through 500 miles of desert country to El Paso which is not in the direct line to any point where either travel or freights would be likely to go, unless Chicago be so considered. The National, on the other hand, leads tolerably direct to Galveston, New Orleans, and through them to Washington and points north and east.

Should the narrow gauge system establish itself in Mexico, as now appears probable, it must lead (and it is no doubt the design of President PALMER) to its union with the narrow gauge system of Colorado, over which he presides, on the one hand, and eastward with the Paramore system to St. Louis, and the Ballou system reaching thence to Pittsburgh. In this view it leaves a thousand miles more of road in this country for Mr. PALMER to construct in order to connect his two networks. The Rio Grande and Pecos Railroad, extending from Laredo to Santa Fe, is that link, and work has been commenced on it at Laredo. The magnitude of the work or the vast sums of money to be raised are apparently no obstacles to this railroad chieftain, as he is at the same time engaged on a line from Denver to Salt Lake, 500 miles, which must compete sharply with the Union Pacific.

AN examination of the employés of the Pennsylvania Railroad Company for color-blindness is being conducted at Pittsburgh. At last accounts upward of 1,200 persons had been examined, and the percentage of those passing was 19 out of every 20.

Mr. Atkinson's Revelations.

The address of Mr. Edward Atkinson at the opening of the Institute Fair will well repay careful reading. It would be hard to find an argument which furnished a more complete answer to the mass of vapory and theoretic assertion put forward by interested capitalists on the one hand and by socialistic agitators on the other. Mr. Atkinson bases his reasoning on two substantial foundations, one being that the aggregate production of this country, and, consequently, the net annual increase in wealth, is, per capita, a very small sum; the other, that freedom of individual action and freedom from restrictive and destructive taxation are requisite for the full development of our natural resources and the welfare of the people of this country.

It hardly seems possible, until reduced to an arithmetical statement, that the annual product of this country in every department of industry, does not exceed 50 cents per day for each man, woman and child. But this sum in the aggregate would represent nearly $10,000,000,000, which is a sufficiently high limit at which to put our yearly product. Out of this there is each year consumed in the process of existence not less than $9,000,000,000, and of the remaining $1,000,000,000 half is consumed in the work of maintaining existing capital in a working condition. Thus there is left to add to the wealth of the country about $500,000,000 per annum; that is to say, the country has this amount of additional wealth this year, represented in factories, railroads, improved lands, etc., that it did not have last year. But this sum, if divided per capita among the people of the entire country, would amount to only a little more than $9 per annum. It is upon this slender basis that our increase in wealth is founded, and yet the development of wealth is perhaps greater in this country than in any other in the world.

If we take from the annual aggregate product of the country the expenses of municipal, State and National Governments it is shown that there is left to a family of four persons, which is a fair unit of calculation, $600 as its proportion of the year's supply. The head of a household so constituted whose income exceeds this amount obtains it in consequence of the fact that others receive less than this sum. On the other hand, if an equal distribution were made of each year's productions, the situation of the intelligent laboring men who receive a fair day's pay for a fair day's work would not be much improved. The communistic notion seems to be that, if such a distribution were made, the poorer classes could live as the rich now do, when, as a matter of fact, there would be only a small addition made to the comforts and luxuries of even the poorest. Those who have wealth are but a small fraction of the community, and their possessions would give but a slight return if rigidly divided among the poorer millions. Equally at variance with facts is the notion of the oppressive power of capital. At the labor meeting in New York, a day or two since, resolutions were passed denouncing monopoly. Such denunciations are utterly meaningless when the particular monopoly and the causes of oppression are not given. Now the New York Central Railroad is, in the opinion of a great many, a monopoly under the control of the Vanderbilt family; but Mr. Atkinson points out that by this concentration of wealth the cost of transportation has been cut down more than half in the last fifteen years. Such a decline would be absolutely impossible if this vast railway system were cut up into small sections, each having its separate staff of employés and its distinct plan of equipment. A great capitalist may, at times, misuse his money, but in the main he must use it in legitimate business undertakings, and in so doing must aid in the development of the country, which implies an enlargement of the opportunities offered to all for profitable employment.

It is in what he said in relation to the burdensome effect of oppressive taxation upon the business interests of the country that Mr. Atkinson struck a chord of thought which should awaken inquiry in the minds of many of those who listened to him. From the first to the last of his address not a word is directly said about protection, but the indirect references were unmistakable. He quietly dismissed the theory that high wages would interfere with freedom of trade by showing that, where industries were largely carried on by the use of machinery and skilled labor required, as is generally the case in this country, the rate of wages tended to increase as the cost of production diminished. His reference to the disability incurred by sustaining a large standing army was an easy parallel to the disability which our country labors under by a system of taxation which increases to each wage earner the cost of living, by compelling him to sustain naturally unprofitable business enterprises. Where the margin between prosperity and want is so narrow the laws which take from a poor man a few cents out of each dollar that he uses in the support of his family is severely felt, and in the aggregate forms an enormous sum. He might have said that the tangible monopoly which the laboring classes should seek to overthrow, was that protection which deprived the country, in the form of indirect taxes, of hundreds of millions of dollars each year. If this could be saved the net annual gain of wealth to the country would be doubled, and in this way the work of each wage earner be made easier, and his means for supplying his wants would be increased.—*Boston Herald, Sept.* 9.

Construction of Competing Lines by the Pennsylvania Railroad.

The Philadelphia *Ledger* says that the Pennsylvania Railroad Company, tired of the course pursued by the Philadelphia and Reading Railroad Company in tapping its territory for local traffic, and at the same time declining to furnish any through traffic to the West except to rival trunk lines, has determined to retaliate by building a new line between Philadelphia and Reading, and competing with the Philadelphia and Reading Railroad for all the local traffic of the Schuylkill Valley. The *Ledger* adds:

"There having been various reports as to the intentions of the Pennsylvania Railroad Company in reference to the proposed competing line to Germantown, Chestnut Hill and Norristown, inquiry in the proper quarter enables us to state that the Pennsylvania Railroad now has under construction a branch line from Frazer's Station (the junction of the West Chester branch with the main line) to Phœnixville, a distance of about twelve miles, which will enable the Pennsylvania Railroad to reach the large furnaces and iron manufacturing establishments at that point, in addition to bringing Phœnixville in direct communication with West Chester, its county town.

"Another branch road will at once be constructed by the Pennsylvania Railroad from a point near Upton, on the main line, 12 miles west of Philadelphia, to Conshohocken, thence along the east bank of the Schuylkill through Norristown to Phœnixville, there connecting with the Frazer branch. The distances by this new branch from Phœnixville, Norristown and Conshohocken to Philadelphia will be as nearly as possible the same as by the Reading Railroad, so that the Pennsylvania Railroad, with its centrally located passenger station and superior freight facilities in Philadelphia, will at once be able to command a large share of the business between this city and the important manufacturing centers in the Schuylkill Valley, and, what is of still more importance, the Pennsylvania Railroad will have direct access for the transportation of coke, coal, iron ores, etc., to the furnaces and mills in the valley of the Schuylkill. The natural result of this points to a still further extension of the line up the Schuylkill Valley at least as far as Reading, to which city, we understand, an engineer corps has been making surveys for some time past, and the extension will undoubtedly be built.

"In addition to these improvements, which, we are informed, are fully determined upon, the Pennsylvania Railroad has about decided to construct a branch road from a point on the New York division, near Broad street, to Germantown and Chestnut Hill, which will bring these large and populous districts in connection with their system of roads.

"These movements of the Pennsylvania Railroad would seem to be a direct blow to the interests of the Reading Railroad, but, when reference is made to a railroad map of the State, it will be seen that the Reading Railroad have from time to time extended branches into the local districts of the Pennsylvania Railroad, until they at present reach every principal local center of traffic on the Pennsylvania lines between Philadelphia and Williamsport by as many as eight or nine branch lines, and the Reading Railroad are now engaged in building a line parallel with the Shamokin branch of the Northern Central Railway and the Philadelphia and Erie Railroad for a distance of about 30 miles, whilst the Pennsylvania Railroad have not heretofore had any branch leading into the Schuylkill Valley or the territory occupied by the Reading Railroad local traffic, all of which has been exclusively enjoyed by that company. The very close affiliation of the Reading with the New York Central and other trunk lines has diverted all the traffic of this large manufacturing district destined to western points and to New York by those lines, which was to a large extent previously enjoyed by the Pennsylvania Railroad. These movements will probably have an effect upon the local traffic of the Philadelphia and Reading Railroad, and the policy that company has been pursuing, in affiliating with other trunk lines to the exclusion of the Pennsylvania Railroad, is the cause of the Pennsylvania Railroad taking this course, in order to secure a share of the traffic of the Schuylkill Valley. The new lines are expected to be all finished by next autumn."

SKETCHES OF PROMINENT RAILROAD MEN.

BY "CURTIS."

GEN. JAMES H. WILSON,

PRESIDENT OF THE NEW YORK AND NEW ENGLAND RAILROAD COMPANY.

ONE of our most prominent railroad men, and one whose fame is not confined to railroad circles alone, but who is well-known in the annals of war and the fields of literature, is GEN. JAMES H. WILSON, President of the New York and New England Railroad Company. Born the 2d of September, 1838, in Gallatin county, Illinois, he was appointed to the United States Military Academy at West Point, from the ninth Illinois District, by Judge Marshal and served as a cadet there from July 1, 1855, to July 1, 1860, graduating with honor, and being promoted to Brevet 2d Lieutenant Topographical Engineers at once, finishing school just in time to enter, after a brief respite, the fierce struggle for the preservation of the Union, where he rapidly won his way to position and fame. The first six or eight months after graduating, he was attached to the Department of Oregon, being called from there when the ominous threatening of the war cloud made it necessary to call to the capital the best blood and brain of the Army to guard the nation in its hour of peril. He proceeded at once to recruit a company of engineer soldiers, being busy about that until October, 1861, when he was ordered to the Department of the South, taking an active part in the bombardment and capture of Fort Pulaski, near Savannah, for gallantry at which he was breveted a Major April 11, 1862, or only about six months after he had entered active service.

In October, 1862, he took part in the battle of South Mountain, and shortly afterwards at Antietam. Being placed with the then Major-General Grant, he was with him in his first marches towards Vicksburg; and as Chief Engineer and Inspector-General of the Army of the Tennessee, he undertook to turn Vicksburg by the Yazoo Pass and Moon Lake. His next promotion, a captaincy in the engineer corps, took place May 7, 1863, he still being engaged in the siege of Vicksburg and in eastern Tennessee. In October, 1863, he received his commission as Brigadier-General United States Volunteers, shortly afterwards taking part in the struggle at Missionary Ridge. In November of the same year we find him promoted again, this time to a Brevet Lieutenant-Colonelcy in the regular Army, for gallant and meritorious conduct at the battle of Chattanooga. While in pursuit of the enemy after that engagement, he gained notoriety for engineering skill by superintending the construction of a bridge over the Little Tennessee River in 32 hours, which was made entirely out of dismantled houses. In active service all the time, he was assigned to the command of the 3d cavalry division of the army of the Potomac, and captured Spotsylvania Court House on May 8, 1864, after being only three days previously breveted a Colonel for gallant conduct at the battle of the Wilderness. Here he showed great activity in cutting communication between various points in the South by destroying railroads, probably little thinking at that time that he would one day hold the foremost position on one of the great New England roads, which would grow and extend under his hand, even as these melted away and became useless under his destruction. It falls to the lot of but few soldiers to win promotion as rapidly as did J. H. Wilson, he being on October 5, 1864, breveted a Major-General of Volunteers for gallant and meritorious services during the rebellion.

Having been selected to command and reorganize the cavalry of the armies serving under Gen. Sherman, he took part in the battle of Nashville in December, 1865, where the rebel Gen. Hood made so stubborn a fight, and was brevetted Brigadier-General of the United States Army for gallantry in this battle. On April 2, 1865, he assaulted and captured Selma, Ala., with a large number of prisoners and stores. Again did a just government recognize his daring qualities and good judgment, and on March 13, 1865, he was breveted a Major-General in the United States Army, for gallantry at Selma. The surrender of Montgomery followed soon after this, then the capture of Columbus with a large amount of military supplies, and the capitulation of Macon followed. Thus in a brief campaign of 28 days, he captured 5 fortified cities, 23 stands of colors, 288 guns and 6,820 prisoners, finally capping the climax of his great honors by capturing Jefferson Davis, with a detachment of his forces. The war being ended, on January 8, 1866, he was mustered out of the volunteer service, being appointed July 28, 1866, Lieutenant Colonel of the 35th regular infantry. Soon after this he was assigned to the more peaceful occupation of superintending for the government the improving of the Rock and Illinois rivers, and of the improvement of the Des Moines and Rock Island rapids in the Mississippi River, being engaged in this up to December 31, 1870, at which time he was honorably discharged from the Army of the United States at his own request. About this time Gen. Wilson turned his attention towards railroading, and in 1870 accepted the position of Vice-President of the St. Louis and Southeastern Railroad, which position he held until 1876, when he was appointed Receiver and General Manager of it.

Gen. Wilson is one of those born to lead, and to whom it is natural for men to look up, he being again and again selected for important positions. In 1872, he was appointed Agent of the Commissioners to negotiate in Europe a loan for the Japanese Government. In 1874, he was appointed a member of the board of visitors to the Naval Academy, and was from January to September of 1876, the Chief Engineer of the Metropolitan Elevated Railroad in New York.

The General is of good size and light complexion, with a clear gray eye and a well-shaped head. He wears only a mustache, his manner is energetic and expressive of great determination.

During this time, although holding arduous and responsible positions, he managed to find time to bring to the eyes of the world sundry readable articles in the magazines of the day, and was one of the compilers of Appleton's American Enclycopædia in 1874. He also, shortly after the close of the war, published a life of Gen. Grant, founded on his near acquaintance and intimate association with him before Vicksburg, at Chattanooga, and in the Army of the Potomac.

Gen. Wilson might really be said to have commenced his railroad career with the St. Louis and South Eastern. While he was yet its receiver he accepted the position of Vice-President of the New York and New England Railroad in October, 1879, retaining also his receivership, till an advantageous lease was made of the St. Louis and South Eastern to the Louisville and Nashville. For nearly two years after his taking the vice-presidency of the New York and New England Railroad, under Wm. T. Hart, who was the first president of the corporation, his labors were very arduous, he assuming many of the duties of president and all of those of vice-president and general manager, having the supervision of the whole road, which he retained, after his succession to the presidency in January, 1881—upon the resignation of Mr. Hart—until January 1, 1882, when Mr. S. M. Felton, Jr., was appointed general manager, relieving Gen. Wilson of a portion of his labors. From the time he took the head of this corporation until its affairs were well organized, he exercised a personal supervision of every department. The General is a pusher, as may easily be seen in conversation with him, his restless and determined manner convincing an observer that he is one who could accomplish a great deal. When he first came to the road he went through every department and reorganized it in harmony with his ideas. The book of rules and regulations issued by him for the government of the company's employés is very complete. It holds each man responsible for the complete fulfilment of every duty, and clearly defines exactly how the business of each department shall be conducted. A great deal has been done since Gen. Wilson began to govern the New York and New England Railroad, showing that he, who was so successful in leading men in war, knew also how to lead and direct them in the arts of peace. This road, as is well known, was built up largely from the ruins of the old Boston, Hartford and Erie Railroad. Commencing where the Boston, Hartford and Erie left off, it has been extended from Waterbury, Conn., to the Hudson River, 79 miles. The Connecticut Central has been bought and a fine terminal made at Fishkill, where connection is made with the West and the coal fields of Pennsylvania. Some 15 miles of double track have been laid from Norwood to Franklin, and about two million dollars have been expended upon its fine terminals at South Boston, than which no finer are in existence. The equipment of the road has been much increased. The earnings of the New York and New England Railroad have increased right along, and the condition of its property has been improved. The new connection with the West at Newburg has brought a largely increased traffic, especially in coal, in which this road now has a trade second to none. It has always been Gen. Wilson's policy to get all the business which was possible for his road, on the

principle that small beginnings ofttimes result in large endings, and that demoralization of rates does not pay. During the last winter he was kept very busy with the legislatures of the States through which his road runs, his greatest move being to induce that of Massachusetts to vote to sell the $3,600,000 worth of stock which it held at a fair price, and in this he was entirely successful. The Boston, Hartford and Erie Company issued two million first mortgage bonds. These were known as the "Berdell" Bonds, and on the reorganization became exchangeable for the stock of the New York and New England Railroad Company at par. The State of Massachusetts early exchanged their bonds, obtaining $3,600,000 par value of stock.

When the act was passed authorizing the sale of this stock, there was a rush of the Berdell bondholders to exchange their bonds for stock at par, so as to obtain the privilege of subscribing for their pro rata share of this stock, which was to be put upon the market at $50 per share, the possessors of the old being allowed to purchase one new share for each four and a fraction of old ones owned by them. So many did this that at present the road has an issuance of $16,000,000 to $17,000,000 of stock, and from 3 to 4 million of unredeemed bonds good for stock, dollar for dollar. Of great financeering ability, Gen. Wilson is fast bringing his road into a sound financial condition. The future of the New York and New England Railroad can but be great. The New York, Ontario and Western, and the New York, West Shore and Buffalo will soon have built to Newburg, when new connections for the West will be ready to be developed; and Gen. Wilson has a happy faculty of being able to extend and form new connections with his road, and of keeping friendly with the old ones. Altogether it may justly be said that Gen. J. H. Wilson is a representative railroad President and one whose record will be great.

Silver City, Deming and Pacific R. R.

A COMPANY has recently been incorporated in accordance with the laws of New Mexico under the name of the "Silver City, Deming and Pacific Railroad Company," the object being to connect at Deming with the Atchison, Topeka and Santa Fe, the Southern Pacific, and the Texas and Pacific railroads. The road, which is now being graded to Silver City, 45 miles west of Deming, is broad gauge, but the intention is to connect it at Silver City with narrow gauge branches to Santa Rita, Fort Bayard, Georgetown and the Moggalon, Lake Valley Mines and the Clifton Mines. Silver City has a population of 3,000, Georgetown, 2,500, while Fort Bayard, Santa Rita and the Burro Mountains and Moggalon, Lake Valley and Clifton mining districts have a rapidly increasing population, and the county is growing more rapidly than any other part of the territory. The amount of freight hauled by teams from Deming to Silver City last year was estimated at three million pounds, and the passenger travel is large. It is designed by the present company to build next year narrow-gauge branch roads to Santa Rita and Georgetown, and to the Clifton copper mining district in Arizona. It is a matter of some surprise that none of the three large roads centering at Deming, have occupied this route, controlling as it will about all the business of Grant county, and which would prove an important feeder to any one of the main lines.

Pullman Palace Car Company.

AT the annual meeting of the Pullman Palace Car Company, held at Chicago on the 7th inst., a statement of the affairs of the company was presented by the president, which was received with marked gratification and approval. The stockholders were especially interested in and enthusiastic over the great plant of the company at the town of Pullman. It was shown that the company has made 15-year contracts with various important lines of railway during the year, covering 4,615 miles; that the number of cars operated was 773; number of passengers carried 1,964,000, increase of revenue over previous year, $742,000; number of miles run by Pullman cars, 54,104,000, without loss of life or serious injury to any passengers.

Northern Pacific Railroad.

THE Government Commissioners, consisting of H. M. Scott, A. R. Johnson and John P. Sanborn, appointed by the President to examine the section of the Northern Pacific Railroad from Glendive to Billings, report that in their judgment the road is constructed in the most scientific manner and of the best material. They believe it to be a good road-bed and will recommend it be accepted by the Government. They were more particularly struck with the rapidity of construction. Eight thousand men are at work on the western division and 7,000 on the northern. Track is being laid at the rate of 1½ miles a day west of Billings. Work is in progress on the road-bed the whole distance. Grading will be completed this season, and only track-laying will remain to do next year, and at the end of this season's job there will be only 300 miles. The road from Portland to Puget's Sound is being pushed rapidly, and at the end of this year will be completed to Columbia River, 45 miles from Portland. The road will be finished next year soon after the completion of the main line.

AN immense planer has been constructed at Pittsburgh capable of planing a piece of iron or other metal ten feet wide, ten feet high, twenty-four feet long, and so arranged that four cutting tools may operate on the work at one time, two being on the crosshead and one on each upright.

THE Sutro Tunnel, now completed, discharges 3,000,000 gallons of hot water daily from the Comstock mines. This water has a temperature of 195 deg., and is conveyed through a closed pine flume to prevent the escape of vapor. After a passage of four miles through the first tunnel it loses 70 deg. of heat. A second tunnel 1,100 feet long and an open waterway a mile and a half long conduct the water to Carson River. Along its course are hot-water baths and laundries, and a plan is on foot to conduct the hot water through pipes under ground to be made available for purposes of irrigation and for supplying artificial heat to hot-houses.

List of Patents for Inventions Relating to Railway Interests.

Bearing date of September 5, 1882.

263,694. Pumping Engine. HARVEY F. GASKILL, Lockport, N. Y. Filed May 8, 1882.

263,701. Boiler: DE WITT C. HILL, Willimantic, Conn., assignor of two-thirds to John Scott, same place, and William E. Barrows, Hartford, Conn. Filed September 30, 1881.

263,702. Boring and Tenoning Machine: CHESTER A. HODGE, Beloit, Wis. Filed April 1, 1882.

263,706. Device for Lighting the Steps of Cars or Carriages: GEORGE W. HUNT, Philadelphia, Pa. Filed July 21, 1882.

263,708. Smoke Consumer: SALMON JONES and GEORGE B. MARSHALL, Cincinnati, Ohio. Filed May 15, 1882.

263,711. Reversing-Valve for Engines: CHARLES N. LEONARD, Indianapolis, Ind. Filed May 23, 1882.

263,726. Car-Coupling-Tool: WILLIAM J. RILEY, Kansas City, Mo. Filed May 12, 1882.

263,732. Car Wheel: GEORGE S. SHEFFIELD, Three Rivers, Mich., assignor to the Sheffield Velocipede Car Company, same place. Filed June 15, 1882.

263,740. Railroad Switch: FRANK A. WHITE, Cortland Village, N. Y., assignor of one-half to Wm. B. Stoppard, same place. Filed February 13, 1882.

263,764. Car-Coupling: CHARLES F. CLAPP and EUGENE R. CLAPP, Hyde Park, Mass. Filed July 5, 1882.

263,765. Car-Coupling: ARTHUR W. COATS, Yuba City, Cal. Filed July 3, 1882.

263,769. Brake-Shoe: JOHN F. CURTICE, Fort Wayne, Ind., assignor to the Standard Brake Shoe Company, same place. Filed January 27, 1882.

263,786. Car-Ventilator: SAMUEL HURST, St. Louis, Mo. Filed June 21, 1882.

263,800. Car-Coupling: NATHAN D. MUSSEY, Reno, Nev. Filed June 23, 1882.

263,812. Crank-Shaft or Journal Bearing: EDWIN A. ROWLEY, Williamsport, Pa., assignor to Rowley & Hermance, same place. Filed June 5, 1882.

263,816. Car-Coupling: SOLOMON SCOTT, Paoli, Ind. Filed July 17, 1882.

263,836. Car-Coupling: ANDREW J. AVERY, Lynn, Mass. Filed April 13, 1882.

263,849. Car-Coupling; SAMUEL BROWN, Manton, Mich. Filed April 25, 1882.

263,867. Air-Brake Pump for Locomotives: DAVID J. DAMPMAN, Philadelphia, Pa., assignor to William H. Bilyeu and John Ambler, both of same place. Filed February 13, 1882.

263,879. Car-Coupling: CHARLES J. EDWARDS, Fairville, Mo. Filed June 13, 1882.

263,884. Controlling the Opening of Gates of Car Platforms: FRANK P. FISH, New York, N. Y. Filed May 22, 1882.

263,916. Car-Coupling: MARTIN V. KING, Bedford, Iowa. Filed July 17, 1882.

263,919. Railroad-Tie: CONRAD F. KREUZ, Milwaukee, assignor of one-half to Jerome D. Clarke, Madison, Wis. Filed May 11, 1882.

263,925. Car-Brake: SVEND LYKKE, Omaha, Neb. Filed April 18, 1882.

263,959. Railway and Depot: HENRY C. REW, Chicago, Ill. Filed February 10, 1882.

263,972. Car-Coupling: THEODORE M. SHARP, Salisbury Mo. Filed March, 30, 1882.

263,988. Car-Axle Lubricator: JOSEPH E. STEGER, New York, N. Y. Filed July 20, 1882.

263,990. Hand-Car: ALLEN M. STONER, New Albuquerque, New Mexico. Filed June 6, 1882.

263,997. Car-Brake: DOLPHUS TORREY, New York, N. Y., assignor to the Torrey Automatic Brake Company, same place. Filed October 11, 1881.

264,018. Stock-Car: SAMUEL C. WISER, Chicago, Ill. Filed April 10, 1882.

264,043. Governor for Steam Engines: JOSHUA P. MC. COOK, Richmond, Va., assignor of one-third to JAMES H. BRUCE, same place. Filed July 22, 1882.

264,045. Device for Attaching Torpedoes to Railway Rails: DANIEL B. MURPHY, Pittsburgh, Pa., assignor of two-thirds to Abraham O. Tinsman, same place. Filed March 25, 1882.

A FINAL consolidation of the New Orleans Pacific and the Texas and Pacific Railroads was effected on the 11th inst.

The Stock Exchanges and Money Market.

New York Stock Exchange.

Closing Prices for the week ending Sept. 13.

	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.	W. 13.
Adams Express	142½	.....	.....	.....	.....	.....
Albany and Susq.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
American Express	.....	.....	.....	95½	.....	96
Burl., C. R. & Nor.	.....	82	.....	82	.....	.....
1st mortgage 5s	100½	101½	.....	100¼	100	100¾
Canada Southern	63¾	64¼	64¾	64¾	66	64¾
1st mortgage guar	93½	.....	93½	.....	.....	93¾
Central of N. Jersey	79¼	79¾	79¾	81¼	81¼	79½
1st mort. 1890	.....	.....	.....	.....	.....	.....
7s, consol. ass	.....	.....	.....	110¼	.....	.....
7s, convertible ass	.....	.....	110	.....	110½	.....
7s, Income	.....	.....	.....	.....	.....	.....
Adjustment	.....	.....	.....	110¼	111	.....
Central Pacific	94	94¾	94	94	94¼	93½
6s, gold	.....	.....	.....	.....	.....	114¾
1st M. (San Joaq)	.....	.....	.....	.....	.....	.....
1st M. (Cal. & Or.)	.....	.....	.....	.....	.....	.....
Land grant 6s	.....	.....	.....	.....	.....	.....
Chesapeake & Ohio	24½	24	.....	24¼	24½	25
1st pref	.....	38	.....	38½	.....	38½
2d pref	25	26	26½	.....	.....	28¼
1st mort., series B	85¾	86½	87	87	.....	87¾
Chicago and Alton	.....	139	142½	142½	144½	144¾
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund	.....	.....	.....	.....	.....	.....
Chi., Bur. & Quincy	.....	135	136½	136¼	135¾	134½
7s, Consol. 1903	.....	.....	.....	.....	.....	.....
Chi., Mil. & St. Paul	125¾	126½	127¾	128	127¾	126
Preferred	142¾	142¾	143¾	144½	144	143
1st mortgage, 8s	.....	.....	.....	.....	.....	.....
2d mort., 7 3-10s	.....	.....	.....	.....	129	.....
7s, gold	.....	.....	.....	.....	.....	.....
1st M. (La. C. div)	.....	.....	.....	.....	129	.....
1st M. I. & M. div.)	.....	.....	.....	.....	129	.....
1st M. (I. & D. ext.)	.....	.....	.....	.....	.....	127
1st M. (H. & D. div.)	.....	.....	.....	.....	.....	.....
1st M. (C. & M. div.)	.....	128	.....	.....	.....	.....
Consolidated S. F.	126½	127½	129	129	129	.....
Chi. & Northwestern	147½	147¾	147¾	148½	149¾	147¾
Preferred	.....	168¾	168	170	170	166
1st mortgage	.....	.....	.....	.....	.....	.....
Sinking Fund 6s	.....	111¾	.....	.....	113	.....
Consolidated 7s	.....	.....	.....	132	.....	.....
Consol. Gold bo'ds	125½	.....	.....	.....	.....	.....
Do. reg	.....	.....	.....	.....	.....	.....
Chi., R. Isl. & Pac.	136½	138½	139¼	140	139½	136¾
6s, 1917, c	.....	.....	.....	.....	.....	.....
Clev., Col., Cin. & Ind.	.....	82¾	83¼	83½	.....	83½
1st mortgage	.....	.....	.....	.....	.....	.....
Clev. & Pittsburg gr.	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	125½	.....
4th mortgage	.....	.....	.....	.....	.....	.....
Col., Chi., & Ind. Cent	13½	13	13	13¾	13½	13¼
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Del. & Hud Canal.	115¾	116¾	116¼	117	116¾	116¼
Reg. 7s, 1891	.....	.....	.....	.....	.....	.....
Reg. 7s, 1884	.....	.....	.....	.....	106	.....
7s, 1894	.....	.....	.....	.....	.....	.....
Del., Lack. & Western	146¾	147¾	148¾	149¾	149¾	147¾
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Consol. 1907	.....	.....	.....	.....	.....	.....
Erie Railway	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mort. 5s, ext.	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	101½	101	101¼	101
4th mort. 5s, ext.	.....	.....	.....	.....	.....	.....
5th mortgage	.....	111¾	.....	.....	.....	.....
7s, Consol. gold	126¾	126½	.....	.....	126	.....
Great West. 1st mort	.....	.....	.....	.....	.....	.....
2d mortgage	.....	104	.....	.....	.....	.....
Hannibal & St. Jo.	.....	.....	.....	.....	.....	48
Preferred	90¾	87¼	87½	89	90¾	90½
8s, Convertible	.....	.....	.....	.....	.....	.....
Houston & Tex. Cen	.....	83	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	125	125	.....
Illinois Central	138¼	139¾	142	142¾	142¼	141
Lake Shore & Mich So	113¾	112¾	113¾	114¾	115	113¾
Consol. 7s	.....	.....	.....	.....	.....	.....
Consol. 7s, reg	.....	.....	.....	.....	.....	126
2d Consolidated	.....	125¾	.....	.....	126	126
Leh. & W. B. con. ass	.....	.....	105	.....	.....	.....
Long Dock bonds	.....	.....	.....	.....	.....	.....
Louisville & Nash.	74¾	74¾	74¾	74¾	74½	73¾
7s, Consolidated	.....	.....	.....	.....	.....	.....
Manhattan	.....	52¾	.....	.....	53¾	53¾
1st pref	.....	.....	.....	.....	.....	91
Met. Elevated	.....	.....	.....	92	.....	.....
1st mortgage	.....	99	90¾	99¾	99½	100
Michigan Central	100	100¾	101¼	102¼	103¼	102¼
7s, 1908	.....	.....	.....	.....	.....	.....
Morris & Essex	126	126¾	126½	127¾	.....	127
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
7s of 1871	.....	.....	.....	.....	.....	.....
7s, Convertible	.....	.....	.....	.....	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
N. Y. Cen. & Hud. R.	135	135	135¾	137½	136¾	135¾
6s, S. F. 1883	102¾	.....	.....	.....	.....	.....
6s, S. F., 1887	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	132	.....	.....	.....
1st mortgage, reg.	.....	.....	.....	.....	132	.....
N. Y. Elevated	.....	.....	.....	.....	.....	.....
1st mortgage	115	.....	.....	.....	.....	114⅞
N. Y. & Harlem	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	132
1st mortgage, reg	.....	.....	.....	.....	.....	.....
N. Y. Lake Erie & W	40	40¾	42½	43¾	43¾	41¾
Preferred	81	82	84¾	87	86½	86
2d Consolidated	.....	98½	99¼	99¾	100¾	100¾
New 2d 5s fund	94½	94¾	95¼	96¼	96¾	97
N. Y., N. Hav'n & Hart	182	.....	.....	.....	180	.....
North Mo. 1st mort	.....	.....	.....	.....	.....	.....
Northern Pacific	52¾	51⅞	52⅞	53¼	53⅞	52⅜
Preferred	96¾	97¼	97½	99⅝	98¾	99¼
Ohio & Mississippi	39	39¼	40	39¾	41	38¾
Preferred	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	123	.....	122
Consolidated 7s	.....	.....	.....	.....	.....	.....
Consol. S. Fund	.....	.....	.....	.....	.....	.....
Pacific Mail S. S. Co	45¾	45¾	45¾	45¾	46¾	44⅝
Pacific R. R. of Mo.	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	106¼	.....	.....	106
2d mortgage	.....	.....	.....	.....	.....	.....
Panama	.....	.....	.....	.....	.....	.....
Phila. & Reading	63¼	64¼	64¼	64¾	65¼	64¼
Pitts, Ft. W. & Chi. gtd	.....	.....	139	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
3d mortgage	.....	.....	.....	.....	.....	.....
Pullman Palace Car	134⅞	134¾	132½	134½	134¾	134⅛
Quicksil'r Min'g Co	.....	.....	11	10¾	10¾	.....
Preferred	45¼	.....	.....	.....	.....	.....
St. Louis & San Fran	.....	42	.....	43	43	43
Preferred	60¾	62½	62½	63½	63¾	64
1st Preferred	.....	99	.....	99¾	100¾	100
St. L., Alt'n & T. H.	41	44	45	44½	47	47
Preferred	85½	88	89	89	89	.....
1st mortgage	.....	.....	.....	.....	111½	.....
2d mort. pref	.....	.....	.....	.....	.....	.....
Income bonds	.....	.....	.....	.....	.....	.....
St. L., Iron Mt. & S	.....	.....	.....	.....	.....	.....
1st mortgage	114	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	108
Toledo and Wabash	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	108	.....
2d mortgage	.....	.....	.....	104½	.....	.....
7s, Consolidated	.....	.....	.....	.....	.....	.....
St. Louis Division	.....	.....	.....	.....	.....	.....
Union Pacific	118	118¾	116½	x116½	116¾	113¾
1st mortgage	.....	.....	116	.....	116	116½
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	.....	118	119	.....	119	.....
United States Ex	74	.....	.....	.....	.....	.....
Wabash, St. L. & Pac	37⅞	38	37⅞	38¼	39½	38
Preferred	67⅞	67¾	67⅞	68½	70⅝	69¼
New mort. 7s	.....	.....	.....	.....	.....	.....
Wells-Fargo Ex	.....	.....	132	.....	.....	.....
Western Pacific b'ds	.....	.....	.....	.....	.....	.....
Western Union Tel.	90¾	90¾	90¾	91⅜	92⅜	91⅛
7s, S. F conv., 1900	118½	118½	.....	.....	.....	.....
FEDERAL STOCKS :—						
U. S. 4s, 1907, reg	118¾	.. ..	.....	.....	120	.....
U. S. 4s, 1907, coup	.....	119¾	120¾	.....	121	.....
U. S. 4½s, 1891, reg	.....	113¾	.....	.....	113¾	.....
U. S. 4½s, 1891, coup	.....	.....	.....	.....	.....	.....
U. S. 5s, cont'd at 3¾	101	.....	.....	.....	101½	101½
U. S. 6s cont'd at 3½	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, reg	.....	.....	.....	.....	.....	.....
Dt. of Col. 3-65s, coup	.....	.....	.....	.....	.....	.....

Boston Stock Exchange.

Closing Prices for the Week Ending Sept. 13.

	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.	W. 13.
Atch., Top. & San. Fe.	94¾	95¾	95	94¾	94¾	95¼
1st mortgage	.....	.....	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Boston & Albany	.....	170	.....	170	171	.....
Boston and Lowell	102	.....	.....	.....	102	.....
Boston & Maine	.....	.....	.....	.....	.....	.....
Boston & Providence	.....	.....	.....	160	.....	.....
Bos'n, Hart. & Erie 7s	59	60¾	.....	.....	.....	.....
Burl. & Mo. R. L. G. 7s	114¾	.....	.....	.....	.....	.....
Burl. & Mo. R. in Neb	.....	.....	.....	.....	.....	.....
6s, exempt	.....	.....	.....	.....	.....	.....
4s	.....	.....	.....	.....	.....	.....
Chi., Burl. & Quincy	135¾	135	.....	135¾	135¾	135¾
Cin., Sand. & Clev ($50)	.....	.....	.....	.....	.....	.....
Concord ($50)	.....	.....	.....	.....	.....	.....
Connecticut River	.....	.....	.....	.....	.....	.....
Eastern	45	45¾	45	46	45¾	.....
New 6s, Bonds	.....	110	110	.....	110	.....
Fitchburg	.....	.....	.....	130	.....	131
N. Y. & New England	58¾	59⅜	57⅞	59	59	58¾
7s	116¼	116¼	116¼	.....	116¼	.....
Northern N. H.	.....	.....	.....	.....	.....	.....
Norwich & Worcester	160	159¾	.....	.....	159¾	.....
Ogden & Lake Cham	.....	.....	.....	.....	.....	.....
Old Colony	.....	133¼	133¼	133¼	133	133¼
Ph., Wil. & Balt. ($50)	.....	.....	.....	.....	.....	.....
Portl'd, Saco & Ports	.....	.....	.....	.....	.....	.....
Pueblo & Ark Val 7s	.....	115	.....	.....	.....	.....
Pullman Palace Car	.....	.....	.....	134	.....	134
Union Pacific	117⅞	.....	118¾	116¾	.....	115
6s	.....	115¾	.....	.....	.....	.....
Land Grant 7s	.....	.....	.....	.....	.....	.....
Sinking Fund 8s	118¼	118¾	.....	118¾	118½	118¾
Vermont & Mass	.....	.....	.....	.....	.....	.....
Worcester & Nashua	.....	.....	.....	59	.....	.....
Cambridge (Horse)	.....	.....	.....	.....	.....	.....
Metropolitan (Horse)	.....	75	.....	.....	.....	.....
Middlesex (Horse)	.....	.....	.....	.....	.....	.....
Cal. & Hecla Min'g Co	254½	254½	.....	254	.....	.....
Quincy	69	69	69¾	69	69	67

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Sept. 12.

	W. 6.	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.
Allegh'y Val. 7 3-10s	.....	.....	.....	.....	.....	.....
7s, Income	.....	51	51½	.....	51½	.....
Buff., Pitts & West.	21⅞	21¾	21⅞	22¼	22¼	22⅛
Camd'n & Am. 6s, '83	.....	.....	.....	.....	.....	.....
6s, 1889	.....	.....	.....	.....	.....	.....
Mort. 6s, 1889	.....	.....	.....	.....	.....	.....
Camden & Atlantic	.....	.....	.....	.....	.....	.....
Preferred	53	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Catawissa	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	56	.....	.....	.....
2d pref	.....	.....	54	54	.....	.....
7s, new	.....	.....	.....	.....	.....	.....
Del. & Bound Brook	.....	.....	.....	.....	.....	.....
7s	.....	.....	.....	.....	.....	.....
Elmira & Williamsp't	.....	.....	.....	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
Hunt. & B. Top Mt.	16¼	16	16	16	16	.....
Preferred	30	.....	29½	.....	.....	.....
2d mortgage	.....	.....	.....	.....	.....	.....
Lehigh Navigation	43¾	43¾	44¾	44¼	44¼	44¾
6s, 1884	103⅜	.....	.....	.....	.....	.....
Gold Loan	.....	.....	.....	113	.....	.....
Railroad Loan	.....	.....	.....	115	.....	.....
Conv. Gold Loan	.....	.....	.....	.....	.....	.....
Consol. Mort, 7s	116¼	.....	.....	.....	.....	.....
Lehigh Valley	62⅜	62½	63	63¼	63¼	65½
1st mort. 6s, coup	.....	.....	122	.....	.....	.....
1st mort. 6s, reg	.....	122	.....	.....	.....	.....
2d mort. 7s	.....	.....	.....	.....	.....	.....
Consol mort. 6s	.....	.....	141	.....	.....	.....
Consol. mtg. 6s, reg	121	.....	.....	.....	.....	.....
Little Schuylkill	.....	.....	.....	.....	.....	.....
Minehill & Sch. Hav'n	.....	.....	.....	.....	.....	.....
North Pennsylvania	.....	.....	.....	.....	.....	.....
1st mortgage 6s	107	.....	.....	.....	.....	.....
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, coup	.....	.....	.....	.....	.....	.....
Genl. mtg. 7s, reg	.....	.....	.....	.....	.....	.....
Northern Central	54¼	54¾	55	55¼	56½	56
5s	97	97	.....	.....	97	97⅜
Northern Pacific	52¼	52	52	52¾	53¼	53¾
Preferred	96⅜	96¼	97½	97	99¼	98¾
Pennsylvania R. R.	62¾	63¼	63½	63¾	64⅜	64¼
1st mortgage	.....	.....	.....	.....	.....	.....
Gen'l mort	.....	.....	.....	.....	.....	125½
Gen'l mort reg	.....	.....	.....	.....	.....	.....
Consol. mort. 6s	.....	.....	121	.....	.....	.....
Consol. mort. reg	.....	.....	.....	.....	.....	.....
Pa. State 5s, new	.....	.....	.....	.....	.....	.....
do 4s, new	116¾	.....	116½	.....	.....	.....
do 3½s, 1912	.....	.....	.....	.....	.....	.....
Phila. & Reading	31½	31¾	.....	32½	32½	32¾
1st mortgage 6s	.....	.....	.....	.....	.....	.....
7s of 1893	.....	121½	.....	.....	.....	.....
7s, new convert	.....	76	76	77	77	77
Consol. mort. 7s	.....	126¼	.....	.....	.....	.....
Consol. mort. reg	.....	126¼	.....	.....	.....	.....
Gen'l mort. 6s	96¼	96¼	96¾	96¾	96¼	.....
Def. Income bonds	.....	.....	.....	.....	.....	.....
Philadelphia & Erie	.....	.....	19¼	19¾	.....	19⅞
1st mortgage 5s	.....	.....	.....	105¾	.....	105
2d mortgage 7s	.....	.....	.....	.....	.....	.....
Pittsb., Cin. & St. L. 7s	120	120	.....	.....	.....	120
Pitts., Tit. & Buff. 7s	94	.....	94	94	.....	95
Schuylkill Navi't'n	..	..	.. ..	.....	.....	.....
Preferred	.....	.....	.....	.....	.....	.....
6s, 1895	.....	.....	.....	.....	.....	.....
6s, 1907	.....	.....	90	.....	.....	.....
United Co. of N. J.	190½	191	.....	.....	191¼	191
Hestonville, (Horse)	.....	15¾	15¾	.....	17	.....
Chestnut & Walnut	.....	.....	.....	.....	.....	.....

Baltimore Stock Exchange.

Closing Prices for the Week Ending Sept. 12.

	W. 6.	Th. 7.	F. 8.	Sat. 9.	M. 11.	Tu. 12.
Baltimore & Ohio	.....	195	.....	.....	195	.....
6s, 1885	.....	.....	.....	.....	.....	.....
Central Ohio ($50)	.....	.....	.....	.....	.....	.....
1st mortgage	.....	.....	.....	.....	.....	109
Marietta & Cincin'ti.	.....	.....	.....	.....	.....	.....
1st mortgage, 7s	.....	.....	.....	.....	.....	.....
2d mortgage, 7s	.....	.....	.....	.....	.....	.....
3d mortgage, 8s	.....	.....	.....	.....	.....	.....
Northern Cen. ($50)	54¼	54¼	55	55	56	56⅛
2d mort. 6s, 1885	.....	.....	.....	.....	.....	.....
3d mort. 6s, 1900	.....	.....	.....	.....	.....	.....
6s, 1900, gold	.....	.....	.....	.....	.....	.....
6s, 1904, gold	.....	.....	.....	.....	.....	.....
Pitts. & Connelsv. 7s	122	.....	.....	.....	.....	.....
Virginia 6s Consol.	60	60¾	.....	.....	60	60
Consol. coupons	.....	.....	.....	.....	.....	.....
10-40 bonds	43¼	43⅛	.....	.....	.....	43⅛
Def'd Certificates	.....	.....	12⅛	.....	.....	.....
Western Maryland	15¾	.....	.....	.....	.....	.....
1st M., end. by Balt	.....	.....	.....	.....	.....	.....
2d M., do.	.....	.....	.....	.....	.....	.....
3d M., do.	.....	.....	.....	.....	.....	.....
1st M., unendorsed	.....	.....	.....	.....	.....	.....
2d M., end. Wash Co	.....	.....	.....	.....	.....	.....
2d M., preferred	.....	.....	.....	.....	.....	.....
City Passenger R. R.	.....	.....	.....	.....	.....	.....

London Stock Exchange.

	Closing Prices Aug. 25.		Sept 1.	
Baltimore and Ohio 5s, 1927	106	108	106	108
Central of N. J., $100 shares	85	90	85	90
Do. consol. mort.	112	114	112	114
Do. Income Bonds	92	96	92	96
Central Pacific of Cal., $100 shs.	94	95	95⅛	96⅛
Do. 1st mort. 6s, 1895-'98	117	118	117	119
Det., G'd Haven & Mil. Equip bds.	116	118	116	118
Do. Con. M. 5p.c., till '83 after 6p.c.	114	116	114	116
Illinois Central $100 shares	139	141	140	142
Do. S. F. 5s, 1003	106	108	106	108
Lehigh Valley Cons. mort. 1923	115	119	115	119
Louisville and Nashville mort. 6s	97	99	97	99
Do. capital stock $100 shares	74	76	74	76
N. Y. Cen. & Hud. R. mort. bonds.	132	136	132	136
Do. $100 shares	136	137	136⅛	137⅛
Do. mort. bonds (stg.)	121	123	121	123
N. Y. Lake Erie & West. $100 shs.	39	39½	40¾	40¾
Do. 6 p. c. pref. $100 shares	70	81	81	83
Do. 1st Con. Mort. bonds (Erie)	126	129	126	129
Do. do. Funded Coupon bonds	124	127	124	127
Do. 2d Consol. Mort. bonds	98	100	99	101
Do. do. Funded Coupon bonds	95	97	95	97
N. Y., Pa. & Ohio 1st mort. bonds	47	48	48	49
Do. Prior Lien bonds (sterling)	103	108	100	105
Pennsylvania $50 shares	63⅛	63¾	63¾	64⅛
General Mortgage	123	125	123	125
Phil. & Erie Gen. mort. 6s, 1920	117	119	117	119
Philadelphia & Reading $50 shs.	30¾	31	30¾	31⅛
General Consol Mortgage	115	117	115	117
Do. Improvement Mortgage	104	106	104	106
Do. Gen. Mtg. '74, ex-def'd coup.	96	98	96	98
St. L. Bridge 1st mort. gold bond.	125	127	125	127
Do. 1st. pref. stock	97	100	97	100
S. P'fic of Cal., 1st mort 6s, 1905-6.	108	110	108	110
Union Pacific 1st mtg. 6s, 1896-9.	118	120	118	122
Wabash, St. L. & P. $100 shares	35⅛	36¾	37½	38⅛
Do. $100 pref. shares	65	66	67	69
Do. gen. mort. bonds	85	87	86	88

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, September 14, 1882.

The quotation for call loans on stocks this morning was 6@7 per cent, and on United States bonds 4@5 per cent. Time loans were 6 per cent, and prime mercantile paper 6@7 per cent. In the afternoon the quotation for call loans at the Stock Exchange was 6@7 per cent, which was the ruling rate for the day until near the close, when it fell to 4 per cent; the closing quotation for money was, however, 5@6 per cent.

The rate for demand sterling was 4.89½ nominally, and 4.88¾@4.89 actually; 60-day bills were 4.84½@4.85 nominally, and 4.83¾@4.84¼ actually. Cable transfers were 4.89¾@4.90. The actual rates for commercial bills were 4.82½@4.83. The actual rates for Continental bills are as follows: Francs, 5.20⅝@5.20 and 5.16⅞@5.16¼; Marks, 94⅝@⅞ and 95⅛@⅜; and Guilders, 40 and 40¼.

There have been listed at the New York Stock Exchange $1,452,000 of the general consolidated railway and land grant mortgage 5 per cent bonds of the St. Louis, Iron Mountain and Southern Railway Company, numbered 32,551 to 34,002 inclusive. These bonds are issued on a branch line of railway extending from Knobel to Forest City, a distance of ninety-seven miles, now completed and in operation, and are at the rate of $15,000 per mile on said branch. Also, $1,379,000 of new bonds of the Missouri, Kansas and Texas Railroad Company. These are first 7s of bonds of $1,000 each, numbers 39,015 to 39,781, both inclusive, issued at the rate of $20,000 per mile upon 38 38-100 miles of railway constructed and completed from Temple, in the State of Texas, to an intersection with the International and Great Northern Railroad at Taylor, in said State, and bonds number 39,782 to 40,411, both inclusive, issued upon 31½ miles of completed railway constructed from Greenville to McKinney, in the State of Texas, being an extension of the East Line and Red River Railroad.

It was reported at the meeting of the Finance Committee of the Northern Pacific Railroad Company on the 13th inst., that the amount due the preferred stockholders was a little over $4,500,000. The preferred stock outstanding is in amount about $42,000,000. These are the surplus earnings of the road since the date of the reorganization of the company, when the holders of the bonds issued under the Jay Cooke *regime* consented to convert the bonds into preferred stock.

Prior to February, 1882, there were no banks in Mexico. At that time a concession was given to a company of French bankers with a capital of $20,000,000. They were given the privilege of issuing bills to the amount of $60,000,000, and promised for the bank the business of the Government offices. In return for the concession the bank gives the Government credit for $10,000,000. There is now no fear of further revolutions in the country, as with this large credit the Government can at once find means to put down an uprising. In the past the difficulty has been a lack of means to support an army. A bank has also recently been established at Sonora, one-fifth of the capital of which is held by Boston parties.

At the annual meeting of the stockholders of the Texas and Pacific Railway Company, held in this city on the 12th inst., the report of the President for the fiscal year ending June 30, 1882, was presented, from which we learn that the amount of the capital stock of company is $28,127,700, and its bonded debt $34,974,000. The construction account is placed at $51,539,539.18, and the income account at $1,543,037.82. The report further states that the company had on the 30th of June assets (including $1,141,531 in securities) amounting to $2,375,773, and current liabilities (including $129,680 for the New Orleans Pacific coupons due on July 1) of $395,562.64. The cumulative interest-bearing debt of the company, exclusive of New Orleans Pacific bonds, is $26,128,000, on which the annual interest charge is $1,567,680. In addition it has outstanding $8,784,000 income and land grant bonds, secured by a first mortgage on 4,600,000 acres of land, principally lying along the line of the Rio Grande division. During the year 229 miles of road were completed and equipped. The company had at the end of the fiscal year 1,153 miles of completed road, with an equipment of 3,559 cars of all descriptions. The operations of the Eastern division from Shreveport to Fort Worth only are given, that being the only division completed at the beginning of the fiscal year. The operations of this division for thirteen months were: Gross earnings, $3,438,978; expenses, $2,629,352; net earnings, $809,126. The annual interest charge on this division is $786,000 or $851,500 for the thirteen months. There were 828,378 tons of freight transported against 641,295 tons for the corresponding period of the preceding year; and 293,753 passengers carried against 257,401. The report adds that these operations would have shown much better had it not been for the fact that large quantities of construction material were carried, from which was derived a very small revenue and which were given the right of way over all the other traffic in order to complete the Rio Grande division. The earnings of the latter division from February 1 to June 30 are given at $848,754.20, the expenses at $534,872.91 and the net earnings at $313,881.29. The percentage of expense to earnings was 63 per cent. Mention is made of the merging of the New Orleans Pacific Railroad with the Texas and Pacific, the former having a bonded debt at the rate of $20,000 per mile and a length of road of 336 miles. Its terminal facilities at New Orleans are stated to be extensive and valuable.

The formal celebration of the completion of several new railroads took place at Louisville, Ky., on the 12th inst. Business was entirely suspended, and all Louisville, with not less than 200,000 strangers, crowded the streets along which the great procession passed. The display of industries, commerce, fire and police departments, and the military was the grandest ever witnessed in the South. The parade was over ten miles in length, and was three hours in passing a given point.

From the report of the Cleveland, Columbus, Cincinnati and Indianapolis Railway for the year ending June 30, 1882, we learn that the net debt has been reduced $2,954,278.20, while at the same time 11,842—or 14.4 per cent—more passengers have been transported; the road has carried one person 5,035,774 miles, or 12.5 per cent further than last year; 227,504 tons, or 8.7 per cent, more freight has passed over the road, making the ton mileage 7,189,562, or 16 per cent more than last year. The rate per ton per mile has decreased from .767 cent in 1881 to .633 cent in 1882. The passenger rate has increased 100th of 1 per cent. There has been a change in the relative proportions of the different kinds of freight hauled, as the following shows: In 1881 coal made up 14.9 per cent of the total tonnage; in 1882, 16.6 per cent; lumber in 1881, 9.8 per cent; in 1882, 12.1 per cent; grain and flour in 1881, 29.4 per cent; in 1882, 19.8 per cent; merchandise in 1881, 20.5 per cent; in 1882, 22.5 per cent; stone, lime, etc., in 1881, 5.1 per cent; in 1882, 7.7 per cent.

The completion of the Chihuahua (or northern) division of the Mexican Central Railway is to be celebrated by grand festivities in the city of Chihuahua, Mexico, on the 16th inst. The completion of the road to that place from El Paso, Texas, 225 miles, is worthy of the eight days of fair and festival. In order to do justice to the occasion there will be illuminations, theatres, concerts, acrobatics, horseraces, military parades, music in the parks by day, serenades at night, balls and entertainments, all kinds of games permitted by law, and a general gala time. On the day of the completion of the railway the national colors will be unfolded at sunrise and saluted by salvos of artillery. State officials and military men will be escorted by cavalry and a detachment of Federal troops to a building specially erected for the day's exercises, where an oration will be delivered by an orator selected by the Governor. A grand excursion to the city is projected from Las Vegas and other New Mexican towns, and it is expected that the occasion will be celebrated with all possible eclat and magnificence. A party of Boston and Chicago gentlemen are now upon their way to take part in the festivities.

At the regular monthly meeting of the directors of the Baltimore and Ohio Railroad Company, held in Baltimore on the 13th inst., the President stated that the earnings of the road for August were $1,851,891.54, the largest revenue earned in any month in the history of the company. The large increase in power by the construction of 103 first-class locomotives and of gondola, box, live stock, and other cars, with the enlargement of the capacity of the freight plant generally and increased facilities of all description upon the lines of the company, enabled it to perform this great work with ease and facility. The organization and capacity of the company are now such that an important increase beyond the present heavy traffic can be handled promptly and successfully. The striking contrast was presented of the comparative earnings of the company for the year preceding the civil war, namely, $300,000 per month, and the result for August.

The quarterly statement of the Western Union Telegraph Company places the net revenues for the quarter ending with the close of the present month, based upon nearly completed returns for July, partial returns for August, and estimating the returns for September, at about $2,250,000. Added to this amount is a surplus of $1,664,240.13 on hand July 1, making a total of $3,914,240.13. From this sum is deducted $106,850 for interest on bonded debt and $20,000 on account of sinking funds, leaving a balance of $3,787,390.13. An appropriation of $1,199,770 is made for the payment of the current quarterly dividend of 1¼ per cent on the company's capital stock, leaving a surplus amounting to $2,587,620.13.

The lease of the European and North American Railroad to the Maine Central Railroad Company has been ratified by the stockholders of both companies.

An extra dividend of 1½ per cent has been declared by the Pullman Palace Car Company, out of the manufacturing profits for the past year, payable on and after October 2, to stockholders of record on the 16th inst.

The advance in the rate of interest on the bonds of the Eastern (Mass.) Railroad Company from 4½ to 6 per cent

which went into effect on September 1, will from this time forward necessitate an increased expenditure of $17,000 per month on interest account. Next year also, for the first time, $100,000 will have to be set aside for the sinking fund. The management, however, hopes next year to earn these extra charges and still be able to make nearly as good a showing as this year. The earnings for the current fiscal year, which closes at the end of the present month, will not be far from $3,400,000, or an increase of about ten per cent over those for 1881. The large expenditures for new equipment and important improvements during the past few months will, however, make the net earnings about the same as those of last year. The road is now, however, in a most excellent condition throughout its entire length; its equipment is first-class and its buildings are all in good shape, so that for several years to come no extraordinary expenditure will be required.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 32; Boston and New York Air Line pref., 79¼; Cleveland and Toledo S. F., 107: Chicago and Northwestern S. F. 5s, 102¼; do. S. F. 7s, 107, Chicago, St. Paul, Minneapolis and Omaha, 53¾; do. pref., 112; do. consol., 106¼; Cedar Falls and Minnesota, 25¼; Chicago, St. Louis and New Orleans, 80; Columbia and Greenville pref., 73½; Chesapeake and Ohio 1st, Series A, 108; do, cur. 6s, 53½; do. pur. money fund, 114½; Chicago, St. Paul and Minneapolis 1st, 112; Chicago, Burlington and Quincy, Iowa div. 4s, 87¾; Chicago, Milwaukee and St. Paul, La Crosse and Dav. div. 1st, 94: do. Chicago and Pacific West div. 1st, 93½; do. Southern Minn. div. 1st, 107½; Central Iowa 1st, 109; Columbus, Chicago and Indiana Central 1st trust Co. certif. ass., sup., 115; Danbury and Norwalk, 69; Denver and Rio Grande, 59½; do. consol., 99½; Denver, South Park and Pacific 1st, 102; East Tennessee, Virginia and Georgia 1s; do. pref., 19½; do. 5s, 74; do. inc., 45½; Evansville and Terre Haute, 85; do. consol., 96½; Fort Worth and Denver 1st, 98¼; Green Bay, Winona and St. Paul, 10¾; do. 1st, 83; do. inc., 24; Georgia, 155. Gulf, Colorado and Santa Fe 1st, 107¼; Hannibal and St. Joseph 6s, consol., 103¾; Houston and Texas Central genl. mort., 100; do. 1st, Western div., 108¾: Indiana, Bloomington and Western, 47½; do. 1st pref., 119; do. 1st, 91; do. Eastern div. 6s, 96; International and Gt. Northern 1st, 105½; do. coup. 6s, 84; Keokuk and Des Moines 1st, 104; Kansas Pacific 1st consols, 104⅜; do. 6s, 1895, 111; do. 6s, Denver div. ass., 109½; Louisville, New Albany and Chicago, 75½; do. 1st, 102½; Long Island, 61; do. 5s, 97¾; Lake Erie and Western, 42; do. 1st, 101½; Lafayette, Bloomington and Muncie 1st, 102; Lake Shore dividend bonds, 122½; Louisville and Nashville, Pensacola div. 6s, 95; do. genl. mort. 6s, 95; Marietta and Cincinnati 2d pref., 6; Michigan Central 5s, 98; Manhattan Beach, 21: Minneapolis and St. Louis, 33½; do. pref., 73; do. 1st Pacific ext., 102; do. 1st Southwestern ext., 111¾, Mobile and Ohio, 23; do. 1st deben., 80; do. 2d deben., 47½; do. 3d deben., 34; Missouri, Kansas and Texas, 40; do. consol. 7s, 106; do. genl. mort. 6s, 87; Missouri Pacific, 111¾; do. 1st consol., 101¾; do. 3d, 112; Memphis and Charleston, 58; Milwaukee, Lake Shore and Western, 57¾; do. 1st, 101½; do. inc., 81⅞; Metropolitan Elevated 2d, 90; New York, Penn. and Ohio inc., 53¾; New York City and Northern genl. mort., 55; New York, Chicago and St. Louis, 16¼; Nashville, Chattanooga and St. Louis, 60; New York, Ontario and Western, 27¼; Norfolk and Western pref., 58¾-Northern Pacific 1st, 103¾; New Orleans Pacific 1st, 91½; Ohio Central, 18¾; do. 1st, 92½; do. inc., 38; Ohio Southern, 17; do. 1st, 85; do, inc., 32½; Oregon Transportation, 96¾; Oregon Railway and Nav., 162; do. 1st, 107½; Ohio and Mississippi, Springfield div. 1st, 119; Peoria, Decatur and Evansville, 36; Rochester and Pittsburgh, 26¼; do. 1st, 104½; do. inc., 50; Richmond, Danville and West Point, 63¾; Richmond and Danville 115¾; do. deben., 78; do. 1st, 100; Richmond and Allghany, 20; do. 1st, 87; Rome, Watertown and Ogdensburg inc., 39¼; do. ext. 5s, 74; St. Louis, Kansas City and Northern, Omaha div. 1st, 113½; St. Paul and Duluth, 35½; do. pref., 92⅞; St. Paul, Minneapolis and Manitoba, 164¾; do. 1st, 110½; do. 2d, 112; do. Dakota ext. 1st, 108; South Carolina, 29; do. 1st, 102½; St. Louis Iron Mountain and Southern 5s, 83; do. Cairo and Fulton 1st, 107; do. Arkansas Branch 1st, 107; St. Louis and San Francisco 2d, Class A, 99; do. C, 90; St. Louis, Alton and Terre Haute div. consols, 62; Southern Pacific of California 1st, 106½; St. Paul and Sioux City 1st, 113¾; Scioto Valley 1st, 95½; Texas and Pacific, 51; do. Rio Grande div. 1st, 85¾; Utah Southern ext., 1st, 92¾; Union Pacific collateral trust 6s, 105¾; Wabash, St. Louis and Pacific, gen'l mort. 6s, 88; do. Chicago div. 1st, 85¾; Louisiana consols, 70; Missouri 6s, 1886, 108; Tennessee 6s, 54½; do. Compromise bonds, 63¾; Virginia 6s, def., 13½; Mutual Union Telegraph, 27; do. 6s, 78; Colorado Coal and Iron, 44; do. 6s, 86½; Maryland Coal, 20; New Central Coal, 21½; Domestic Mining, 18¾; Ontario, 38¾, Standard, 8; Sutro Tunnel, ⅜.

Philadelphia.—American Steamship Co., 20; Belvidere-Delaware 2d, 105¼; Central Transp., 35; Huntingdon and Broad Top Mt. 1st, 110; Nesquehoning Valley, 54¾; Norfolk and Western pref., 58¾; Pennsylvania Canal 6s, 92; Philadelphia City 6s, 1897, 129; do. 1899, 131; do. 1892, 132½; do. 4s, series J, 107; do. series B, 112½; Pennsylvania and New York Canal 7s, 1896, 122¾; do. 1906, 124½; Philadelphia, Wilmington and Baltimore 4s, 96; Philadelphia and Reading scrip, 100; do. deben. 6s, 63; do. consol. mort. 6s, gold, 113½; Philadelphia, Germantown and Norristown, 111; Schuylkill Nav. 6s, 1897, 106¾; Sunbury, Hazleton and Wilkesbarre 2d, 25; Union and Titusville 7s, 95; West Jersey 6s, 1883, 101. The latest quotations are: City 6s, 108 @120; do. free of tax, 127@132; do. 4s, new, 108 @114; Pennsylvania State 5s, new loan, 116@117; do. 4s, old, 108@113; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 32¼@32¾; do. consol mort. 7s, reg., 126@126½; do. gen'l mort. 6s, coupon 96½@96¾; do. 7s, 1893, 121@122; do. new conv., 76@78; United New Jersey R. R. and Canal, 192@195; Buffalo, Pittsburg and Western, 22¾@22¾; Pittsburgh, Titusville and Buffalo 7s, 94¾@95¼; Camden and Amboy mort. 6s, 1889, 113@115; Pennsylvania R. R., 64¼@64¾; do. general mort. 6s, coupon, 125@126; do. reg., 128@129; do. consol. mort. 6s, reg., 120½@121½; Little Schuylkill R. R., 57@58; Schuylkill Navigation pref., 13@13½; do. 6s, 1882, 90@92; Elmira and Williamsport pref., 58@60; do. 5s, 100@101; Lehigh Coal and Navigation, 44¾@44¾; do. 6s, 1884, 103@104; do. R. R. loan, 114@116; do. Gold Loan, 113@113½; do. consol. 7s, 116@117; Northern Pacific, 53¾@53⅞; do. pref., 98¾@98⅞; North Pennsylvania, 63½@64½; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg. 122@123; Philadelphia and Erie, 19¾@20; do. 7s, 113½ @115; do. 5s, 104½@105½; Minehill, 61½@62; Catawissa 23 @24; do. pref., 55@55½; do. new pref., 54@54½; do. 7s, 1900, 118@—; Lehigh Valley, 65⅝@65¾; do. 6s, coupon, 122 @123; do. reg., 122@123; do. 7s, 131½@135; do. consol. mort., 121½@122½; Fifth and Sixth streets (horse), 160@161; Second and Third, 112½@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 80@90; Chestnut and Walnut, 89@90; Germantown, 70@75; Union, 108@110; West Philadelphia, 114½@115½; People's 16½@17¼; Continental, 103@105.

Boston.—Atlantic and Pacific, 28; do. 6s, 97; do. inc., 28; do. blocks, 111¾; Atchison, Topeka and Santa Fe 5s, 98; Burlington and Missouri River in Neb. 6s, nonexempt, 103; Boston Water Power, 4⅜; Cedar Rapids and Missouri River, 109; Cincinnati, Sandusky and Cleveland 7s, 104¾; Chicago, Burlington and Quincy 7s, 126½; do. 4s, old, 85¾; do. 4s, Denver ext., 84½; Connotton Valley, 7¾; Connecticut and Passumpsic Rivers R. R. pref., 94; Chicago, Milwaukee and St. Paul, Dubuque div. 6s, 104; Detroit, Lansing and Northern, 77½; Flint and Pere Marquette, 22½; do, pref., 96; Iowa Falls and Sioux City, 92¾; Kansas City, Ft. Scott and Gulf pref., 125; Kansas City, St. Joseph and Council Bluffs 7s, 115; Little Rock and Fort Smith, 55; Mexican Central, 28½; do. 7s, 85; do. blocks No. 3, 100; Marquette, Houghton and Ontonagon, 71; do. pref. 119; Massachusetts Central, 4¼; do. 6s, 39½; New York and New England 6s, 105¾; New Mexico and Southern Pacific 7s, 114¾; Ogdensburgh and Lake Champlain inc., 35; do, consol. 6s, 90; Oregon Short Line 6s, 103½; Rutland, 3¾; do. pref. 23¾; do. 6s, 99; Sonora 7s, 106¾; Summit Branch 13¾; Toledo, Cincinnati and St. Louis, 8; do. 6s, 68; do Branch inc., 18¼; Toledo, Delphos and Burlington, Dayton div. 6s, inc., 19; Tarkio Valley 7s, 108; Wisconsin Central, 19¾; Atlantic Mining Company, 2⅝; Franklin, 17; Huron, 3¾; National 2; Osceola, 34; Pewabic, 11¾; Sullivan, 3.

Baltimore.—Atlantic Coal, 1.15; Baltimore City 6s, 1902, 126¼; do. 6s, 1890, 116; do. 5s, 1916, 125; Columbia-Charlotte and Augusta, 55¾; Canton Co. 6s, 102¾; Columbia and Greenville pref., 70¼; Chesapeake and Ohio Canal 6s, 37; Maryland 6s, exempt, 110; Marietta and Cincinnati 2d Trust certificates, 101¾; do. 3d do., 58½; Northern Central 5s, series A, 97¼; do. B, 97: Ohio and Mississippi, Springfield div. 1st, 120; Richmond and Danville 6s, 100; Virginia and Tennessee 2d, 101¾; Virginia Midland 2d mort., 107½; do. 5th mort., 95; Virginia 10-40 coupons. 66; Virginia Peelers, 35¾. The latest quotations are: Atlanta and Charlotte 1st, —109; Baltimore and Ohio, 194; do. 6s, 1885, 107¾@—; Baltimore City 6s, 1884, 102½@103¾; do. 6s, 1890, 114@—; do. 6s, 1902, 126@—; do. 5s, 1894, —@116; do. 5s, 1916, 125@—; Columbia and Greenville 1st, 101—@102; Canton Co. 6s, 102¾@103¾; Central Ohio pref., 51½@—; Marietta and Cincinnati 1st, 128@128¾; do. 2d, 101½ @101¾; do. 3d, 58¼@58½; Northern Central, 56½@56¾; do. 6s, 1904, gold, 115¼@—; do. 5s, Series A, 97@97¾; do. B, —@97¼; Virginia Midland 5th mort., 94@95; do. inc., 70@75; Virginia consols. 60@61; do. 10-40s, 43@43¼; Wilmington Columbia and Augusta, 108@108½.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 2, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	120,446	5,916,554	5,726,671
Schuylkill Canal	16,270	293,168	376,796
Lehigh Valley	78,896	4,523,095	4,157,012
Delaware, Lackawanna and Western	78,500	2,930,635	2,769,185
Shamokin	28,810	741,094	710,209
Central R. R. of New Jersey	178,633	2,856,071	2,804,771
United R. R. of New Jersey	27,849	1,113,563	1,017,856
Pennsylvania Coal	24,005	886,623	879,857
Delaware and Hudson Canal	55,186	2,235,321	2,333,341
Huntingdon and Broad Top Mountain	12,635	279,349	345,744
Penn. and New York	24,511	1,072,028	1,092,915
Clearfield, Pa.	57,349	1,924,039	1,610,666

The total tonnage of anthracite coal from all the regions for the week ending Sept. 2, as reported by the several carrying companies, amounted to 475,666 tons, against 560,925 tons in the corresponding week last year, a decrease of 85,259 tons. The total amount of anthracite mined for the year is 18,359,837 tons, against 17,752,931 tons for the same period last year, an increase of 606,906 tons. The quantity of bituminous coal sent to market for the week amounted to 110,222 tons, against 92,697 tons in the corresponding week last year, an increase of 17,525 tons. The total amount of bituminous mined for the year is 2,787,709 tons, against 3,261,929 tons for the corresponding period last year, a decrease of 474,220 tons. The total tonnage of all kinds of coal for the week is 585,888 tons, against 653,622 tons in corresponding week last year, an increase of 67,734 tons, and the total tonnage for the coal year is 21,147,546 tons, against 21,014,860 tons to same date last year, an increase of 132,686 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 2, was 212,212 tons, of which 164,292 tons were coal and 47,920 tons coke. The total tonnage for the year thus far has been 7,321,738 tons, of which 5,396,039 tons were coal and 1,925,669 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 2 were 44,540 tons, and for the year to that date 669,292 tons, a decrease of 696,038 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 21,604 tons; year, 539,259 tons; decrease as compared with 1881, 343,796 tons. Chesapeake and Ohio Canal—Week, 13,277 tons; year, 43,685 tons; decrease as compared with 1881, 259,615 tons. Pennsylvania Railroad — Week, 9,520 tons; year, 86,166 tons; decrease from last year, 16,783 tons. The Reading Railroad shipment for last week, ending September 9, was about 128,500 tons, of which 28,350 tons were sent to and 52,500 tons shipped from Port Richmond, and 10,540 tons sent to and 11,200 tons shipped from Elizabethport.—*Philadelphia Ledger, Sept.* 11.

GEO. A. SANDERSON has been appointed General Freight and Passenger Agent of the Northern division of the Mexican National Railway, to take effect Sept. 1, with headquarters at Laredo, Texas.

GORDON & DUGGAN
RAILWAY SWITCH.

The **Standard** on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with **Fixed Rails.**

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

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Locomotives—Five Second-hand Narrow Gauge Engines in good order.
One Second-hand "Tank" Narrow Gauge Engine, 10 tons.
Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
One new 3ft. Gauge Saddle Tank Engine, delivery this month.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Three Second-hand Passenger Coaches in good order.
Rails—16lb., 30lb. and 56lb. Rails in store.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

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WEST.

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Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, *DETROIT AND CHICAGO.*

3.00 P.M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P.M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville Tolono, Decatur and St. Louis, making direct connection with through Express Trains fo Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P.M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

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In effect January 9th, 1883, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*....100	2,500,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3½
Atch., Top. and S. Fe100	54,000,000	q'arterly	Aug. '82 1½
Atlanta and W. Point100	1,232 200	semi-an	Jan. '82 6
Atlantic and St. Law*100	5,840,000	semi-an	Mar.'82 3
Augusta and Savan'h100	1,022,900	semi-an	June'81 3½
Avon,Genesee&MtM*100	225,000	semi-an	July '81 3
Baltimore and Ohio.100	14,792,566	semi-an	May '82 5
" " pref.100	5,000,000	semi-an	July '82 3
Washington Br....100	1,650,000	semi-an	Apl.'82 5
Berkshire*.....100	600,000	q'arterly	Apl. '82 1¾
Boston and Albany..100	20,000,000	q'arterly	Sept.'82 2
Bos.&N.Y.AirLine pf.100	2,795,227	q'arterly	June'82 1
Bos.,Cl.,F.&N.B.pref.100	1,750,100	.....	Apl. '82 3½
Bos.,Conc.&Mont.pf*100	800,000	semi-an	May '82 3
Boston and Lowell..500	3,940,000	semi-an	July '82 2
Boston and Maine....100	6,921,274	semi-an	May '82 4
Boston & Providence100	4,000,000	semi-an	May '82 4
Attleborough Br....100	131,700	semi-an	July '82 3½
Bos.,Revere B &Lynn100	419,400	semi-an	July '82 3½
Buffalo,N. Y. & Erie*.100	950,000	semi-an	June'82 3
Camden & Atlantic.. 50	377,400	q'arterly	Apl '80 3§
" " pref. 50	880,650	q'arterly	Apl '80 3½§
Camden & Burl. Co..100	381,925	semi-an	July '82 3
Canada Southern....100	15,000,000	.....	Feb. '81 2½
Cape May &Millville* 50	447,000	semi-an	June'81 3
Catawissa*.....50	1,159,500	annual	Oct. '81 $1½
" pref.....20	2,200,000	semi-an	May '82 3½
" new pref.. 50	1,000,000	semi-an	May '82 3½
Cayuga and Susq.*.. 50	589,110	semi-an	July '81 4½
Cedar Rapids&Mo.R*100	6,850,400	q'arterly	Aug. '82 1½
" " pref.100	769,600	semi-an	Aug .'82 3½
Central of Georgia....100	7,500,000	semi-an	June '82 4
Central of New Jersey100	18,563,200	q'arterly	July '76 2½
Central Ohio*..... 50	2,437,950	semi-an	July '82 3
" pref... 50	411,550	semi-an	July '82 3
Central Pacific 100	59,275,500	semi-an	Aug. '82 3
Chemung*..... 100	380,000	q'arterly	July '81 1½
Cheshire preferred...100	2,155,300	semi-an	July '82 1½
Chicago and Alton....100	11,181,741	semi-an	Sept. '82 4
" " pref 100	2,245,400	semi-an	Sept. '82 4
Chi., Burl. & Quincy.100	55,337,455	q'arterly	Sept. '82 2
Chi., Iowa & Nebras*.100	3,916,200	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3½
" " pref 100	14,401,483	semi-an	Oct. '82 3½
Chi. & N. Western....100	14,988,257	semi-an	June'82 3½
" pref.100	21,525,353	q'arterly	Sept. '82 2
Chi., R. I. & Pacific..100	41,960,000	q'arterly	Aug. '82 1¾
Chi. and West Mich .100	6,151,000	semi-an	Feb. '82 2½
Chi.,St.P.,M.&O.pref.100	10,390,000	q'arterly	July '82 1¾
C., Ind., St. L. & Chi..100	6,000,000	q'arterly	July '82 1½
Cin., Sand. & Clev.pf. 50	429,037	semi-an	May '82 3
Clev. and Mahoning* 50	3.759,200	semi-an	Nov. '81 3½
Clev. and Pittsburg* 50	11,244,336	q'arterly	Sept. '82 1¾
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept.'82 2
Colum.&HockingVal.100	2,500,200	semi-an	Aug.'81 20s
Concord 50	1,500,000	semi-an	May '82 5
Concord and Ports.*.100	350,000	semi-an	July '82 3½
Conn.& Passump.Riv100	2,244,400	semi-an	Aug '82 3
Connecticut River ..100	2,100,000	semi-an	July '82 4
Cumberland Valley.. 50	1,292,950	q'arterly	July '82 2½
" 1st pref 50	241,900	semi-an	Apl. '82 4
" 2d pref. 50	243,000	semi-an	Apl. '82 4
Danbury & Norwalk. 50	600,000	.....	Apl. '82 1½
Dayton and Mich.*.. 50	2,402,573	semi-an	Apl. '82 1½
" " pref. 50	1,211,250	q'arterly	July '82 2
Delaware*..... 25	1,468,940	semi-an	July '82 3
Del. & Bound Brook*100	1,652,000	q'arterly	Aug. '82 1¾
Del., Lack.& Western 50	26,200,000	q'arterly	July 82 2
Denver & Rio Grande.100	29,160,000	q'arterly	Jan. '82 1½
Den.,South P. & Pac.100	3,500,000	.....	Aug.'80 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug.'82 2½
" " pref.100	2,508,380	semi-an	Aug.'82 3½
Dubuque&Sioux C'y*100	5,000,000	semi-an	Apl. '82 3
East Pennsylvania*.. 50	1,709,550	semi-an	July '82 3
East Mahanoy*..... 50	392,050	semi-an	July '82 3
Eastern (N. H.).....100	492,500	semi-an	June'82 2½
Eel River.....100	3,000,000	q'arterly	Sept. '82 $1
Elmira.Jef.&Canand*100	500,000	annual	Sep. '80 5
Elmira&Williamsp't* 50	500,000	semi-an	May '82 1½
" " pref. 50	500,000	semi-an	July '82 3½
Erie and Pitsburg*.. 50	1,998,400	q'arterly	June'82 1¾
Evansville & Terre H.100	100,000	semi-an	Nov.'81 2
Fitchburg..... ..100	4,500,000	semi-an	July '82 3
F. & P. Marquette pf.100	6,500,000	semi-an	July '82 3
Ft.W. & Jackson pref.100	2,000,000	.....	May '82 2
Georgia. ..... .100	4,200,000	q'arterly	July '82 2½
Granite 100	1,250,000	semi-an	July '82 3
Han. & St. Jo. pref .100	5,083,024	semi-an	Aug. '82 3½
Harrisbg&Lancaster 50	1,182,500	semi-an	July '82 3½
Housatonic pref. ...100	1,180,000	q'arterly	July '82 2
Illinois Central.....100	39,000,000	semi-an	Sept. '82 3½
Ia.Falls & Sioux City*100	4,623,500	q'arterly	Sept. '82 1¾
Iowa R. Land Co....100	7,620,000	q'arterly	Aug. '82 1
Jeffersonv. Mad.&Ind100	2,000,000	q'arterly	May '82 1½
Joliet and Chicago*..100	1,500,000	q'arterly	June'82 1¾
Kan.C.,Ft.S.&Gulf...100	4,000,000	.....	Feb. '82 2
" " pref...100	2,750,000	semi-an	Aug. '82 4
Kentucky Central...100	500,000	semi-an	June'81 1
" " pref..100	5,583,500	semi-an	June'83 1
Lake Shore&Mich.So.100	49,466,500	q'arterly	Aug. '82 2
" (guar.)100	533,500	semi-an	Aug. '82 3
Lawrence*..... 50	450,000	q'arterly	July '82 2
Lehigh Valley..... 50	27,496,895	q'arterly	Oct. '82 2
" pref. 50	106,300	q'arterly	Oct. '82 2

Marked thus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Little Miami..... 50	4,637)300	q'arterly	Sept.'82 2
Little Rock & Ft. S..100	4,096,135	.....	July' 81 10s
Little Schuylkill*.. . 50	2,646,100	semi-an.	July '82 3½
Louisville & Nashv..100	19,130,913	semi-an.	Feb. '82 3
Lowell & Andover...100	500,000	semi-an.	Jan. '82 3½
Lykens Valley.....100	600,000	q'rterly.	Oct.' 81 2½
Manchester & Law..100	1,000,000	semi-an.	May '82 5
Manhattan 100	13,000,000	.....	.....
" " 1st pref.100	6,500,000	q'rterly.	Oct. '82 1½
" " 2d pref.100	6,500,000	q'rterly.	Oct. '82 1½
Marietta& Cincinnati 50	1,386,350	.....	.....
" " 1st pref 50	8,105,600	semi-an.	Sep. '66 3§
" " 2d pref 50	4,440,000	semi-an.	Sep. '66 3§
Marq.Hout.&Ont.pf...100	2,259 026	.....	Aug. '82 4
Massawippi*..... 100	400,000	semi-an.	Aug. '82 3
Metropolitan 100	6,500,000	q'rterly.	Oct. '82 1½
Michigan Central....100	18,738,204	q'rterly.	Aug.'81 1
Middlesex Central...100	280,000	semi-an.	Aug.'82 3
Mill Creek&Minehill* 50	323,000	semi-an.	July '82 5
M.Hill& Schuyl.Hav* 50	4,022,500	semi-an.	July '82 3½
Missouri Pacific.....100	28,169,800	q'rterly.	Oct. '82 1¾
Mobile&Montgomery100	3,022,517	semi-an.	Feb. '80 2½
Morris and Essex.... 50	15,000,000	semi-an.	July '82 3½
Mt Carbon&PtCarbon 50	282,350	semi-an.	July '82 6
Nashua and Lowell..100	800,000	semi-an.	July '82 4
Nashua & Rochester.100	1,305,800	semi-an.	Apl. '82 1½
Nashv. & Decatur....100	1,827,000	semi-an.	June'81 3
Nash.,Chat.&StLouis 25	6,670,325	semi-an.	Apl. '82 1½
Naugatuck.....100	2,000,000	semi-an.	July '82 5
Nesquehoning Val'y* 50	1,300,000	semi-an.	Sept.'82 3
N.Castle&Beaver Val* 50	600,000	q'rterly.	Oct. '81 —
NewLondonNorth'n*100	1,500,000	q'rterly.	July '82 1½
N. Y. Cen. & Hud. R.100	89,428,330	q'rterly.	Oct. '82 2
N. Y. and Harlem....100	7,950,000	q'rterly.	July '82 4
" " pref.100	1,500,000	q'rterly.	July '82 4
" City Line.. —	.....	annual	Apl. '82 3
N.Y.,LakeErie& West.100	77,083,900	.....	.....
" " pref.100	8,156,825	.....	Jan. '82 6
N. Y., N. H. & Hart..100	15,500,000	semi-an.	Jan. '82 5
N. Y., Prov. & Boston100	3,000,000	q'rterly.	Aug. '82 2
Niag.Bridg&Canand*100	1,000,000	semi-an.	July '81 3
North Carolina*.....100	3,000,000	semi-an.	Sept. '81 3
" " pref.100	1,000,000	semi-an.	Sep. '81 3
N. Eastern (S.C.) pref100	86,000	semi-an.	May '81 4
Norfolk & Western pref.	15,000,000	q'rterly.	Sept. '82 $1
North Pennsylvania. 50	4,527,150	q'rterly.	Aug. '82 1¾
Northern Central.... 50	6,142,000	semi-an.	July '82 3
Northern N. Hampsh100	3,068,400	semi-an.	June'82 3
Northern N. Jersey*.100	1,000,000	semi-an.	July '80 2½
Norwich&Worcester*100	2,604,400	semi-an.	July '82 5
Ohio 100	18,500,000	.....	.....
Ohio and Miss. pref..100	4,030,000	semi-an.	Mar.'75 3½
Old Colony.....100	7,333,800	semi-an.	July '82 3½
Oregon R'way&Nav.100	6,000,000	q'rterly.	Aug. '82 2
Oswego & Syracuse..100	1,320,400	semi-an.	Aug.'81 4½
Panama..... 100	7,000,000	.....	July '82 6½
Paterson & Hudson*.100	630,000	semi-an.	July '82 4
Paterson & Ramapo.100	248,000	semi-an.	July '82 4
Pember.&Hightst'n*. 50	342,150	semi-an.	Jan. '82 3
Pennsylvania..... 50	77,672,750	semi-an.	May '82 4
Pennsylvania Co..... 50	20,000,000	semi-an.	June'81 2½
Peoria & Bureau Val*100	1,200,000	semi-an.	Feb. '82 4
Philadelphia & Erie*. 50	7,013,700	semi-an.	.....
" " pfd 50	2,400,000	semi-an.	Jan. '75 4
Phil,Ger.&Norrist'n* 50	2,231,900	q'rterly.	Sept.'82 3
Phil. and Reading... 50	32,726,375	q'rterly.	Jan. '76 2½
" " pref. 50	1,551,800	q'rterly.	July '76 3½
Phila. and Trenton..100	1,250,100	q'rterly.	July'82 2½
Phila., Wil. and Balt. 50	11,585,750	semi-an.	July '82 4
Pittsb.,Ft. W. & Chi.*100	19,714,285	q'rterly.	July'82 1¾
" Special Imp.100	6,770,900	q'rterly.	July'82 1¾
Pittsfield&N.Adams..100	450,000	semi-an.	July '82 2½
Portl., Saco & Portsm100	1,500,000	semi-an.	July '82 3
Providence &Worces.100	2,000,000	semi-an.	July '82 3
Rensselaer&Saratog.*100	7,000,000	semi-an.	July'82 4
Rhode Island& Mass.100	100,000	.....	Jan. '81 3
Richmond& Danv...100	3,866,000	q'rterly.	Aug. '82 2
Richmond & Petersb100	1,009,300	semi-an.	Jan. '81 3
Roch.&Genesee Val.*100	555,200	semi-an.	July '82 3
Rutland preferred.. 100	4,000,000	semi-an.	Sept. '82 1
St.L.,Alt. & T.Haute.100	2,300,000	.....	.....
" " pref.100	2,468,406	.....	May '82 3
St.L.&S.Fran.1st pref100	4,500,000	.....	Aug. '82 3½
St.L.,I.Mt.&South'n.100	21,459,921	semi-an.	Feb. '74 3
St.L.,Jac'ville & Chic.100	1,293,000	.....	Aug. '82 4½
" " " pref.100	1,634,000	.....	Aug. '82 4½
St. P. & Duluth pref.100	4,705,000	q'rterly.	June'82 1½
St. P., Minn. & Man..100	20,000,000	semi-an.	Aug.'82 3½
Schuylkill Valley*... 50	576,050	semi-an.	July '82 2½
Seaboard & Roanoke.100	1,229,600	semi-an.	May '82 5
Shamokin V.&Pottsv 50	669,450	semi-an.	Feb.'82 3
Shore Line*.....100	1,000,000	semi-an.	July '82 4
Sioux C.&Pacific pref.100	169,000	semi-an.	Apl. '82 3½
South Br. (N. J.)*....100	438,300	semi-an.	Jan. '82 3
South Western (Ga.)*100	3,892,300	semi-an.	Dec. '81 3½
Stockbridge&Pitts.*.100	448,700	semi-an.	Oct. '81 1½
Syr.,Bingham&N.Y.*100	2,500,000	semi-an.	Feb. '81 2
Terre Haute & Ind....100	1,988,150	semi-an.	Aug. '82 4
Troy and Boston....100	1,609,000	semi-an.	Feb. '80 2
Union Pacific 100	61,000,000	q'rterly.	Oct. '82 1¾
United Cos of N. J.*.100	20,490,000	q'rterly.	July '82 2½
Utica, Shenango&S V100	4,000,000	semi-an.	Nov.'81 3
Utica and Black Riv.100	1,772,000	semi-an.	Mar. '82 2
Vermont and Mass..100	3,050,000	semi-an.	Apl. '82 3
Wab, St.L.&Pac.pref.100	22,615,100	q'rterly.	Nov.'81 1½

Markedthus(*)are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Ware River*.....100	750,000	semi-an.	July '82 3½
Warren (N. J.)..... .100	1,800,000	semi-an.	Apl. '82 3½
Warwick Valley.....100	340,000	semi-an.	July '82 2½
Westchest&Phil.pref100	821,300	semi-an.	July '80 2
West Jersey.....100	1,359,750	semi-an.	Sept. '82 3
Wilmingt'n&Weld'n.100	1,456,200	semi-an.	July '82 3
Wil., Col., & Aug 100	960,000	semi-an.	July '82 3
Winchester&Poto'c.*100	180,000	semi-an.	July '82 3
Winchester&Strasb.*100	74,700	semi-an.	July '82 3
Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1½
HORSE-POWER R. R.			
Albany City.....100	200,000	annual	.....'80 5½
Baltimore City..... 25	1,000,000	semi-an.	July '82 3
Balt.,Cat.&El. Mills..100	....	semi-an.	July '82 2
BleeckerSt.&Ful.F'y.100	900,000	semi-an.	July '81 3½
Boston&Chelsea pref. 50	110,000	semi-an.	Apl. '82 3
Broadway (Brooklyn)100	250,000	q'arterly	Oct. '81 3
B'way&7th Av,(N.Y.)100	2,100,000	q'arterly	Oct, '81 2
B'klyn&Hunter's Pt.100	400,000	semi-an.	Apl. '79 3
Brooklyn City.....100	2,000,000	q'arterly	Dec.'81 3½
Bushwick (Brooklyn)100	300,000	semi-an.	July '81 2½
Cambridge..... 100	008,000	q'arterly	Apl. '82 4½
Cen.Park,N.& E.Riv.100	1,800,000	q'rterly.	July '82 2
Christoph'r&TenthSt100	650,000	semi-an.	Aug.'81 2½
Citizens' (Phil.)..... 50	192,500	q'rterly.	Jan. '82 2½
Citizens' (Pbg.)..... 50	200,000	annual..	....'80 14½
Coney Island&Bklyn100	500,000	semi-an.	Oct. '80 5
Continental (Phil.).. 50	580,000	semi-an.	July '82 6
D.Dock,E.B'way&Bat100	1,200,000	q'arterly	Nov.'81 4
Eighth Av. (N. Y.)....100	1,000,000	q'rterly.	Oct. '81 3
42d St. & G. St. Ferry100	747,000	semi-an.	Nov.'81 6
Frankf.&Southw (Ph) 50	600,000	q'rterly.	Jan. '82 6
Germantown, (Ph.).. 50	572,800	q'rterly.	July '82 2½
Girard College (Ph.) . 50	500,000	semi-an.	July '71 3
Grand St. & Newton.100	170,091	semi-an.	July '81 2½
Green&Coates St.(Ph) 50	150,000	q'rterly.	July '82 3
Heston,Mantau&F'm 50	209,381	semi-an.	Jan. '75 4
Highland.....100	600,000	semi-an.	July '82 4
Lomb.&SouthSts(Ph) 25	195,000	semi-an.	Oct. '75 4
Lynn and Boston.... 100	200,000	semi-an.	May '82 4
Malden and Melrose.100	165,000	.....	.....
Metropolitan (Bost.). 50	1,500,000	semi-an.	July '82 4
Middlesex (Boston)..100	650,000	semi-an.	May '82 3½
N.Y.,Bay Ridge&Jam100	150,000	.....	Oct. '78 7
Ninth Av. (N. Y.)....100	707,320	.....	.....
Orange &Newark.....100	282,555	.....	.....
People's (Phila.) pref. 25	124,744	.....	July '82 2
Philadelphia City... 50	475,000	semi-an.	July '82 4
Phila. and Darby.... 20	200,000	semi-an.	July '81 3½
Phila.&Grey's Ferry. 50	308,000	semi-an.	Jan. '82 6
Pbg,Alleg.&Manches. 50	300,000	q'rterly.	Oct. '81 3
Ridge Avenue (Ph.).. 50	420,000	semi-an.	Oct. '81 11
Second Avenue (N.Y.)100	1,100,000	semi-an.	July '81 2½
Second&ThirdSt.(Ph) 50	771,076	q'rterly.	Jan. '82 4½
17th &19th sts (Ph.).. 50	250,000	semi-an.	July '81 3
Sixth Avenue (N. Y.)100	750,000	semi-an.	Oct. '81 5
Somerville (Boston).100	113,000	semi-an.	May '82 3
South Boston..... 50	600,000	semi-an.	July '82 4
Third Avenue, N. Y..100	2,000,000	q'rterly.	Nov.'81 5
13th and 15th sts.,Ph 50	334,520	q'rterly.	Jan. '82 4
23d street, N. Y.....100	600,000	semi-an.	Aug.'81 4
Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Union, Phila..... 50	1,005,000	semi-an.	Jan. '82 7
West Philadelphia... 50	750,000	semi-an.	July '77 10
CANALS.			
Chesapeake and Dela 50	2,078,038	semi-an.	June'75 2
Delaware Division... 50	1,623,350	semi-an.	Aug. '82 $1
Delawa. and Hudson100	20,000,000	q'rterly.	Sept. '82 1¾
Delaware & Raritan*.100	5,847,400	q'rterly.	July '82 2½
Lehigh Coal and Nav 50	11,204,250	semi-an.	June'82 2
Monongahela Nav... 50	1,004,500	semi-an.	July '82$3
Morris, consolidated.100	1,025,000	semi-an.	Aug. '81 2
" preferred....100	1,175,000	semi-an.	Aug. '81 5
Pennsylvania..... 50	4,501,200	.....	.....
Schuyl. Nav., com.*. 50	850,100	annual..	Au. '81 50c.
" " pref.. 50	3,200,000	annual.	Aug. '81 $1
MISCELLANEOUS.			
Adams Express.....100	12,000,000	q'rterly.	Sept.'82 2
American Express... 50	18,000,000	semi-an.	July '82 3
Amoskeag Manuf.Co.100	3,000,000	semi-an.	June'81 5
Calumet&HeclaMin'g 25	100,000 S.	q'rterly.	Aug. '82 $5
Central Mining Co...100	.....	semi-an.	Feb.'82 2½
Consolidation Coal..100	10,250,000	semi-an.	Jan. '82 2
George's Creek C.&I.100	.....	semi-an.	Jan. '82 3
Maryland Coal.....100	4,400,000	semi-an.	Feb. '76 1½
Mariposa L. &Mining100	10,000,000	.....	.....
" pref100	5,000,000	.....	.....
Missouri Val.LandCo100	200,000	semi-an.	July '82 12
National Tube Works100	1,000,000	q'rterly.	July '82 3
Pac. Mail Steamship.100	20,000,000	q'rterly.	Sept.'69 3
Pennsylvania Coal... 50	5,000,000	q'rterly.	Aug. '82 3
Pullman Palace Car..100	10,032,800	extra	Sept.'82 1½
Quicksilver, com....100	5,708,700	.....	May '82 0.4
" pref....100	4,291,300	.....	May '82 6
Quincy Mining Co... 25	40,000 shs	semi-an.	Aug. '82 $5
Quincy R. R. Bridge.100	1,750,000	semi-an.	July '82 5
SiouxC.&I.F.L.&L.Co100	500,000	semi-an.	June'82 5
Spring Mt. Coal.....100	1,500,000	semi-an.	June'82 3½
Topeka Equip'nt Co..100	255,500	semi-an.	Apl. '82 5
United States Ex....100	7,000,000	q'rterly.	Aug. '82 1
Wells-Fargo & Co. Ex100	6,250,000	semi-an.	July '82 4
Western Union Tel..100	80,000,000	q'rterly.	Oct. '82 1½

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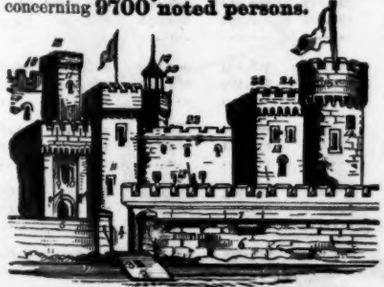

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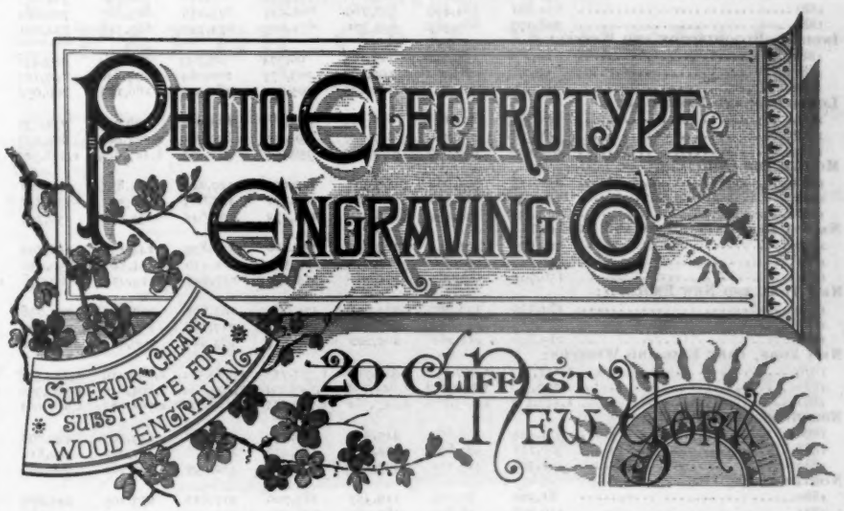

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	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Burl., Cedar Rap. & Northern:													
1880	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882	252,823	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
Central Pacific:													
1880	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
Chesapeake and Ohio:													
1880	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,303	235,585	203,562	2,702,762
1882	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
Chicago and Alton:													
1880	534,054	497 013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	696,776	574,695	7,718,198
1881	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882	579,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
Chicago and Northwestern:													
1880	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
Chicago, Burlington and Quincy:													
1880	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882	1,658,834	1,457,300	1,566,217	1,530,838	1,505,261	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee and St. Paul:													
1880	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis and Omaha:													
1880	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,586	363,685	382,714	380,733	391,950	3,981,296
1882	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	.....	.....	.....	.....	.....
Cincinnati, Indianapolis, St. Louis and Chicago:													
1880	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881	182,523	171,511	191,005	183,710	191,056	192,299	177,161	229,858	219,977	212,606	194,805	192,623	2,296,916
1882	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
Denver and Rio Grande:													
1880	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	.....	.....	.....	.....	.....
Hannibal and St. Joseph:													
1880	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	202,567	313,433	201,782	180,376	2,230,961
1882	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
Illinois Central:													
1880	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673 182	8,304,812
1881	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737 218	763,475	8,586,397
1882	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	.....	.....	.....	.....	.....
Indiana, Bloomington and Western:													
1880	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881	90,383	83,261	192,085	203,677	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
Louisville and Nashville:													
1880	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
Mobile and Ohio:													
1880	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,789	209,044	252,921	252,434	262,025	2,406,437
1882	161,433	158,154	152,651	145,272	137,645	132,572	136,398	140,443	.....	.....	.....	.....	.....
Nashville, Chattanooga and St. Louis:													
1880	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175966'	2,049,484
1881	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882	156,994	159,961	161,005	154,155	137,645	119,074	160,991	1,03c,385	.....	.....	.....	.....	.....
New York and New England:													
1880	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198 108	2,396,302
1881	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882	213,840	217,261	265,222	263,544	283,244	290,060	308,920	353,726	.....	.....	.....	.....	.....
New York, Lake Erie and Western:													
1879	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880	1,296,381	1,252,218	1,644,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
Northern Central:													
1880	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881	386,157	382,657	452,906	487,273	465,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882	407,368	413,551	430,194	435,129	482,607	482,762	509,683	.....	.....	.....	.....	.....	.....
Northern Pacific:													
1880	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881	116,508	78,803	162,984	216,210	312,705	412,024	393,260	434,085	490,096	565,485	428,903	434,331	4,044,576
1882	239,800	269,000	384,000	438,000	568,332	631,342	679,240	727,377	.....	.....	.....	.....	.....
Philadelphia and Erie:													
1880	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881	224,303	225,501	285,573	293,323	343,792	350,585	291 669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882	252,727	246,246	265,311	277,851	341,415	347,614	377,206	.....	.....	.....	.....	.....	.....
St. Louis and San Francisco:													
1880	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873	328,194	290,329	226,063	2,698,371
1881	212,435	178,234	262,050	265,298	283,399	260,254	252,333	286,373	279,064	308,569	284,320	287,914	3,160,245
1882	256,784	244,654	274,959	242,806	253,419	240,177	318,613	381,637	.....	.....	.....	.....	.....
St. Louis, Alton and Terre Haute:													
1880	153,139	163,737	168,994	155,462	147,928	150,207	191,077	216,759	204,295	221,863	188,773	184,503	2,146,741
1881	175,725	166,012	201,137	197,447	172,177	165,896	165,393	189,180	187 299	179,921	162,544	153,852	2,112,801
1882	168,987	149,619	178,145	157,450	162,842	142,742	192,017	236,137	.....	.....	.....	.....	.....
St. Louis, Iron Mountain and Southern:													
1880	555,983	490,195	451,560	408,241	349,053	363,454	432,655	565,869	671,219	688,365	632,052	656,951	6,265,597
1881	570,957	560,791	704,002	548,300	479,075	474,302	533,512	644,386	690,400	719,239	687,280	709 498	7,319,744
1882	516,370	501,127	585,008	581,977	519,120	529,700	515,519	675,981	.....	.....	.....	.....	.....
St. Paul, Minneapolis and Manitoba:													
1880	180,239	137,645	261,798	333,014	281,899	243,407	272,089	232,579	274,188	345,057	300,675	297,641	3,160,231
1881	254,187	159,482	320,962	425,685	382,642	405,322	387,488	414,954	485,736	605,708	508,530	528,262	4,878,960
1882	395,461	418 358	531,004	570,890	858,902	856,417	853,296	801,759	.....	.....	.....	.....	.....
Texas and Pacific:													
1880	245,785	219.165	215,070	174,177	141,083	153,066	195,711	226,073	266,570	303,666	312,184	301,858	2,754,408
1881	281,176	260,781	319,928	295,066	281,782	285,405	328,063	381,331	337,117	578,668	357,724	381,218	3,921,569
1882	310,785	255,644	332,911	359,543	409,228	384,713	367,215	439,918	.....	.....	.....	.....	.....
Union Pacific Railway:													
1880	1,433,636	1,393,992	1,730,509	1,937,220	2,027,269	1,928,528	1,934,215	1,913,035	2,270,179	2,707,860	2,251.148	1,869,335	23,448,445
1881	1,339,799	1,374,740	1,674,860	1,766,894	2,319,238	2,884,774	2,528,826	2,638,659	2,844,357	3,289 350	2,773,608	2,267,004	27,451,831
1882	1,961,088	1,759,863	2,226,832	2,462,004	2,491,590	2,508,453	2,301,000	2,762,107	.....	.....	.....	.....	.....
Wabash, St. Louis and Pacific:													
1880	776,790	759,451	978,629	892,024	948,773	953,468	1,966,742	1,189,478	1,178,950	1,501,203	1,131,787	1,050,816	12,428,112
1881	811,617	818,922	1,121,592	1,023,482	1,144,660	1,308,993	1,131,752	1,542,838	1,490,027	1,396,300	1,399.555	1,328,278	14,461,570
1882	1,220,965	1 134 768	1,315,776	1,378,194	1,204,864	1 149 632	1 418,837	1,772,554	.....	.....	.....	.....	.....

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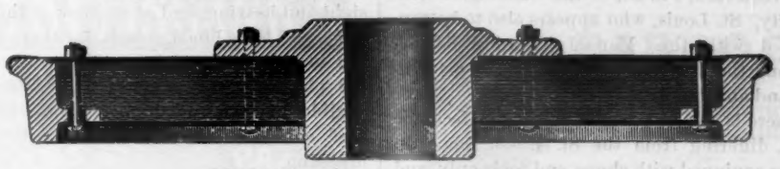

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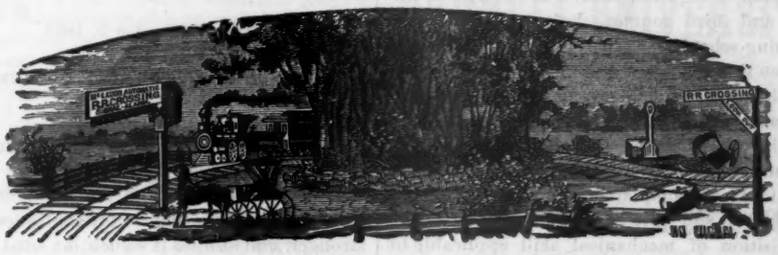

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The Education of Locomotive Engineers.

Editor AMERICAN RAILROAD JOURNAL:

In my last communication I proposed to indicate a plan for a school to educate youths for locomotive engineers. Since it was written, I find in the September number of the *Popular Science Monthly* an article bearing directly on this subject, and describing a school which has been in operation at St. Louis for two years. The article is entitled "An American Manual Training School, and was written by Prof. C. M. Woodward, Ph. D., of the Washington University, St. Louis, who appears also to be connected with the Manual Training School. Among the teachers are "a first-class machinest and an expert blacksmith."

There is also at Boston a School of Mechanic Arts, differing from the St. Louis school in being equipped with shops and tools only, and not with study and recitation rooms; and in having a two-years' course, instead of three.

The St. Louis school has five parallel courses of instruction, viz: 1, Pure mathematics; 2, Science and applied mathematics; 3, Language and literature; 4, Penmanship and drawing; 5, Tool-work in woods and metals.

It might be presumed that a boy having in view the occupation of locomotive engineer would have acquired enough knowledge in the first and third courses, before entering the training-school, to answer the needs of his calling, so that three years would give time to gain considerable proficiency in the other three courses.

It is to be observed that the institution does not undertake to manufacture anything for sale, nor to teach completely any particular trade. Graduates will have gained a great start in the acquisition of mechanical skill applicable to speedy perfection in any of the useful arts; for their teaching has special reference to rapid improvement in the use of tools, and not the production of articles for profit. It is therefore probable that the young graduate could perfect himself in the art of building any particular kind of machinery by one year's constant service in the shop, under the careful supervision of a competent foreman. Having then become an expert machinist, he ought to learn how to drive an engine perfectly in six months more. Commencing at the age of fourteen in the training-school, in less than five years the boy would acquire a good education and a skill in handicraft fit for building and running a locomotive, and for learning rapidly to construct any other machinery of iron and steel. Such men need never be out of employment of some kind.

Before meeting the article referred to, I had in mind the Agricultural and Mechanical Colleges, which have been established in most of the States upon the foundation of lands granted by Congress in 1862 on the basis of population. The larger States consequently have been able to give these colleges a liberal support. It seems to me practicable for an organization possessing the numbers and power of the Brotherhood of Locomotive Engineers, to induce the managers of some of these institutions to put in operation a training-school something like the one at St. Louis, and to make an arrangement with one of the great locomotive works for a special course of instruction following the other. Before leaving the training-school, the boys would be skillful enough not to damage tools nor materials, and they might earn enough for their support. The Brotherhood would not find it too expensive to pay the salary of a skilled mechanic, apt to teach, for the purpose of superintending and instructing the cadet engineers in locomotive building.

The course of instruction should conclude with a thorough examination, and diplomas should be conferred on those who pass successfully. This examination might include tests of sight and hearing and soundness of the heart, lungs and large blood vessels, for those intending to drive locomotives. Those who fail in the physical examination only, would still be eligible for the workshop, and those who succeed could always face the worsteds without flinching.

A scheme like the one here briefly outlined would enable locomotive engineers to give their sons an entrance into a useful and respectable avocation and to elevate it gradually to the dignity of a profession. I believe this would be practicable, under good management; and it would be found that money thus expended would benefit their class and calling vastly more, in the long run, than funds raised and appropriated for sustaining labor strikes.

S. S. H.

NEW ORLEANS, September 9, 1882.

Earthquake in the City of Mexico.

Editor AMERICAN RAILROAD JOURNAL:

On the 19th of July I was sitting at my desk here talking to a young Mexican friend, when I felt the house trembling and thought a very heavy cart was passing, but it continued to get stronger, and at once it struck me what it was.

I turned to Sr. Garcia, Chief-Engineer's clerk, and said in Spanish, "Esta tremblor." (Is it an earthquake?) He was at his desk, about half asleep, but no sooner were the words out of my mouth, than he shot out of the door, with the messenger boy after him. Of course all this only occupied a few seconds, but by this time the house was swinging round so much that we staggered like drunken men, and with difficulty could keep our feet. Franco (my friend) said, in Spanish, "Here, Jack, come under this door, it is the safest place."

So we went and braced ourselves under a side door in the room, and waited to see which way the house would fall. You could hardly imagine the feelings and scene. The houses on the other side of the street rocked and rolled about as if they would fly into a thousand pieces. The walls above us cracked and groaned, the doors swung open and shut, and the floor was no more stable that the deck of a vessel on the sea, in a heavy swell. In fact many persons became sea-sick, and I was more so than at any time coming down on the ship. People rushed into the street, dropped on their knees, prayed aloud, and confessed their sins.

Horses stopped and spread their feet as far apart as they could, and stood like marble.

The last shock was the hardest, and if it had lasted many seconds longer our houses would have fallen. It was the heaviest shock Mexico has had since 1845, and a very queer motion, the waves traveling in circles. You can imagne it looked funny, if it had not been so serious, to see a cobble-stoned street heave like the swell of the ocean. O.

THE second annual report of the Chicago Railway Weighing Association shows that during the past year 550,000 cars were weighed, carrying nearly 20,000,000 pounds of freight. The savings to the fifteen roads interested are estimated at twenty-five per cent of the gross earnings.

IN France, a law dated July 8, 1882, has just been published, declaring of "public utility" the construction of the Junction Canal between the Meuse and the Scheldt. The cost of the works is estimated at 67 million francs, which sum will be included in the ordinary expenditure of the budget.

THE Union Switch and Signal Company, of Pittsburgh, Penn., have recently placed, or are now placing, their interlocking apparatus in towers on the Boston and Albany Railroad; at Rockville, on the Pennsylvania Railroad; at Cleveland, on the Cleveland, Columbus, Cincinnati and Indianapolis (forty-four levers); on the Eastern Railroad of Massachusetts; and at Wayne Junction, on the Philadelphia and Reading Railroad system.

THE largest fly-wheel of a stationary engine ever constructed in the United States was completed on the 12th inst. by Watts & Campbell, Newark, N. J., for Clark's Thread Works, in that city. The wheel is built in seven sections, each weighing seven tons. It is twenty-five feet in diameter and its "face" is seven feet six inches. It has three crowns on which three twentyfour inch belts run. The lathe was two weeks running, night and day, in turning off the face of the monster wheel, and five tons of chips were planed from the surface. It took 5 minutes 55 seconds for the wheel to make one revolution on the lathe. The total weight of the wheel is forty-nine tons.

THE Pardee Car and Machine Works, at Watsontown, Pa., are about finishing up a contract with the New York, Susquehanna and Western Railroad Company, for gondola and caboose acrs. The superiority of the work turned out is beginning to be appreciated. Although but recently commencing business, they take rank with the oldest firms in the country. They have now numerous inquiries, for cars of different kinds, and letters, asking them to make bids on contracts. The Kelly Turn-table, manufactured by this firm, for cheapness and durability cannot be surpassed. They are putting them up for railroads all over the country, from Canada to Texas. Their low price, combined with their other excellences, brings them within the reach of the smallest companies.

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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular eaders of th paper, but that it will meet with the earty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

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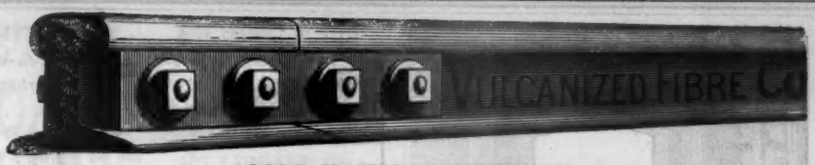

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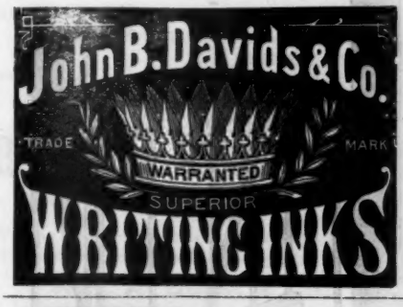

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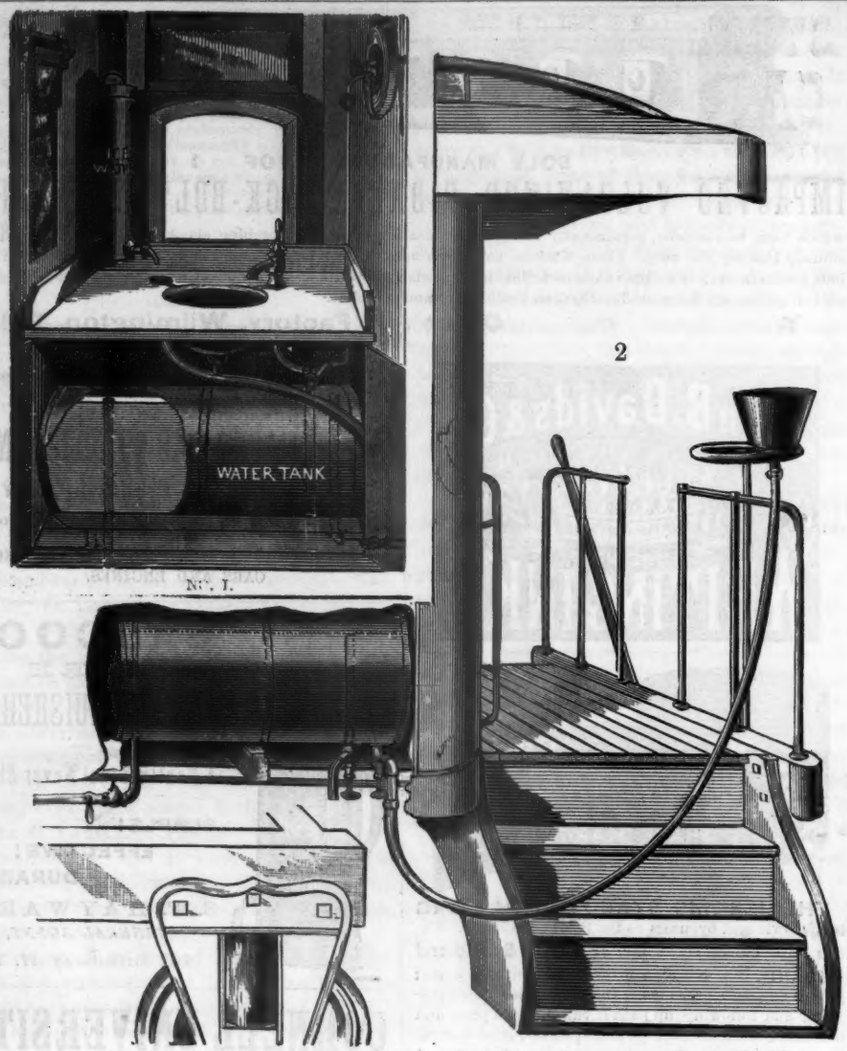

Granger's System of Water Supply for Railroad Cars.

THE engravings herewith illustrate Granger's method of supplying water, under air-brake pressure, to the wash bowl, fire hose and water closet of a railway passenger coach.

Figs. 1, and 2 represent the system as applied in the three latest cars built for the through passenger traffic of the Fitchburg Railroad.

Fig. 1 shows the water tank under marble slab and wash bowl, with part of its side cut away in front of the pipe which admits air pressure from air-brake pipes for use in expelling the water either through the pipe to the hose reel, the wash basin, or across the car to the water closet. The air supply is delivered above the water in tank. The water pipe at the right starts from bottom of tank, as indicated by dotted lines through the word "tank."

The fire hose reel above the slab is of brass, nickel plated, and runs loose upon the body of valve, which may be opened by its wheel in front to admit water to the hose, said hose being intended for fire purposes only. The reel contains 50 feet best quality ¾ linen hose, and is wound double. When unreeled, the bite falls from center hook of reel, and the hose, with one end attached to valve, will be entirely released, and is of sufficient length to reach the extreme end of this or the next car, for use inside or out, as emergency requires. The fire protective feature will commend itself to all.

Fig. 2 shows exterior end of car, with side cut away showing position of tank, valves and piping, with hose connected for filling tank with water by use of funnel placed in brake wheel. It will be observed that the cock in air pipe to the left is closed, to keep back air supply in automatic reservoir, and the valve of overflow pipe, shown by dotted lines in extreme right, is open to let out air from tank, till water fills to level of top of overflow pipe, as indicated by dotted lines. Both the filling and overflow valves, by their stems, are opened outward from within the tank, and when closed all water drains out, and none is left for action of frost. The air pipe also extends above water line, so as never to be affected by contents of tank. The short hose and funnel here shown are carried in closet of tank for use only where hydrant pressure cannot be obtained. Ordinary hydrant hose coupling would attach to filling valve, and under hydrant pressure tank would fill rapidly, say in two minutes. When the tank has been filled and valves closed, the cock in air pipe is to be opened, admitting air pressure from automatic reservoir for use in supplying what water may be required before making up of the train and re-supplying pressure from locomotive.

Further particulars may be obtained by addressing the inventor, A. M. Granger, 177 Devonshire street, Boston, Mass.

Railways in Ireland.

STATISTICS prove that there has hitherto been a most unaccountable absence of railway and commercial enterprise in Ireland, and that there is ample room for great expansion. Proportionately to other parts of the United Kingdom the extension of the railway system in Ireland has been very small indeed. There has been no material improvement in trade and commerce, or commensurate development of its colleries or mining industries for many years past, while there is a positive decrease in population. In the year 1801, when the union with England was effected, the population of England was 9,334,549, while last year it had increased to 25,968,286. In Ireland, in 1801, the population was 5,319,867, while last year it was only 5,159,839, so that while England has nearly trebled its population within the past 80 years, Ireland has lost nearly 200,000. This decreased population, and the stagnation of trade and commerce, is unquestionably due to the absence of railways and of commercial enterprise. Again, the total length of the railways open in Ireland on Dec. 31, 1881, was only 2,370 miles, the nominal capital being only £33,741,058, the gross receipts £2,695,272, and the net revenue £1,230,635. Thus for the whole of that extensive country the total capital expended on its railways and their total revenue is scarcely one-third of the amount expended and earned upon one of the great railway systems in England. The nominal capital of the London and Northwestern Railway Company is no less than £92,456,537, and its gross receipts were, in 1880, £9,827,022. The nominal capital of the Great Western is £66,693,695 and the gross receipts £7,281,329. The Midland nominal capital is £67,807,681 and the total receipts £6,771,384. The nominal share capital of the Northeastern is £55,137,019 and the gross receipts £6,436,852. Compared with other of our English lines, those of our sister isle would bear equally significant results. These facts prove there is ample room for almost any expansion of railways, and the outlay of English and resident capital if anything like Government guarantee could be obtained for a fair return thereon. It might be added as an inducement to capitalists to turn their attention to Ireland for the investment, that the cost of railway work there is most moderate, owing to the almost entire absence of tunnels, that the average cost of the lines constructed was only about £16,000 per mile, while the last official returns showed that, notwithstanding the adverse circumstances under which they labored, the dividends averaged £3 14s. 9d. per annum for the past year. The whole of the Irish lines are exempt from the payment of Government passenger duty.—*London Mining Journal.*

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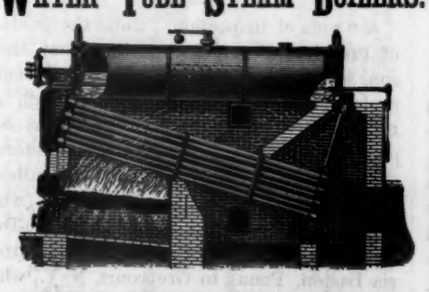

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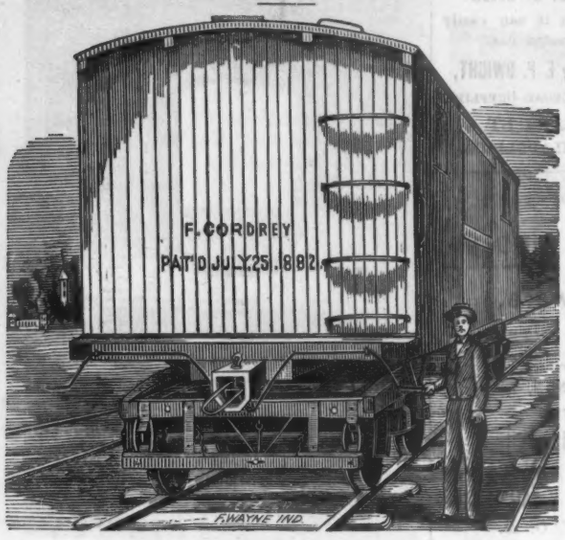
Car Coupling.



In view of the fact that thousands of men are annually multilated and killed under the present system of coupling cars, which is no less cruel than the infernal-machines used in the eastern Continent for blowing up men, the patentee respectfully calls the attention of railroad companies to patent number 261,683, issued to Francis Cordrey, July 25th, 1882. This arrangement, though simple, is in itself a model of perfection. So completely can the car link be operated with this invention that the beholder, on first viewing its work, will cry "Perfect," and we think that a fair estimate of the additional cost of attaching it to a car—two ends—will not exceed $1.20, as will be seen by this engraving.

It only consists of a $\frac{5}{8}$ or a $\frac{3}{4}$ bar of iron, a crank-handle formed on either end, and crank-bail passing under the draw-bar, to which is attached a shove-tongue passing up through the under lip of the draw-head and, when operated, elevates the link to any required position. Two bearings fasten it to the car bed or platform, and it is operated from either side of the car, doing away with bent links; making any coupling that can be made by hand, placing the entire person out of danger.

We do, for the sake of humanity, earnestly ask that an investigation and a fair trial of this invention be made. Information will promptly be given by the patentee, Francis Cordrey, Fort Wayne, Ind.

The Speed of Modern Steamships.

[From the *Century* Magazine.]

Thirty years ago sixteen days was a fair allowance for the passage between England and New York by steam. By gradual steps the point was reached when eleven days was the minimum, and this startled the world. Then began a rivalry between the Inman and White Star lines, attended by a succession of runs showing a gradual increase of speed, which proved a great advertisement for these lines. In 1871 the average time of twenty-four crack voyages by these lines was eight days, fifteen hours and three minutes The Adriatic's best westward time was forty-three minutes less. It should be remembered that the westward passage is generally longer than in the other direction, owing to westerly winds and the Gulf Stream. In emulation of this speed, in 1877 the City of Berlin, of the Inman Line, made the trip to Queenstown from New York in seven days, fourteen hours and twelve minutes, and in the same year the Britannic, of the White Star Line, crossed from Queenstown in seven days, ten hours and fifty-three minutes. In 1879 a new rival appeared in this field, the Arizona, of the Guion Line. This steamship made the eastward passage in 1880 in seven days, ten hours and forty-seven minutes, and in one trip in 1881 she lessened this time about three hours. This seemed to be about the best that could be expected of these superb ships, when the new Guion steamship Alaska, after a number of astonishing runs accomplished the westward passage between the two ports on April 18, 1882, in seven days, six hours and twenty minutes, actual time, against heavy seas. In a subsequent trip eastward she ran the distance in six days and twenty-two hours, actual time. In this, the quickest passage ever made across the Atlantic, the Alaska traveled 2,895 knots, being about an average of 418½ knots per day for seven successive days. It will be observed that the increase of speed has been graduated in proportion to the gradual increase in size. The ships of 1850 were rarely much over 2,500 tons, and were barely 300 feet long. Now the average length of ocean steamers is upward of 400 feet, while 500 feet is not uncommon. The City of Rome is 587 feet long, and registers 8,826 tons; the Servia is 530 feet, and 8,500 tons; the Alaska is 520 feet and 6,932 tons; the Austral, intended for the Australian trade, is 474 feet long and 48 feet 3 inches broad, and registers 9,500 tons. The measurement of this vessel and of the new Cunarder, Cephalonia, which is 440 feet long by 46 feet beam, indicate that the reaction against extreme length has already commenced in the great shipyards of Great Britain, being in each of these cases less than ten beams to the length.

Lehigh and Hudson River Railroad.

A "tour of inspection," under the guidance of President Burt and Superintendent Anderson, was made on the 7th inst., over the entire route of the recently completed Lehigh and Hudson River Railroad. The party was composed of railroad officials and stockholders to the number of 175. The road is 63 miles in length, extending from Belvidere, N. J., (where a junction is formed with the Belvidere-Delaware division of the Pennsylvania Railroad) via Easton, Penn., to Greycourt, N. Y., where it connects with the Newburgh branch of the New York, Lake Erie and Western Railroad, and through that branch (at Newburgh) with the New York and New England Railroad, running thence to Boston. A connection is also made at Easton with the Lehigh Valley and the Central Railroad of New Jersey.

The main purpose of the Lehigh and Hudson River Railroad, in which it is understood the Pennsylvania Railroad Company has a large interest, is the transportation of coal to the eastern States without breaking bulk. The future of the road as a carrier of coal to the eastern market is said to be very promising, taking not only a large tonnage for this destination from the Pennsylvania but also from the Lehigh Valley, the Central of New Jersey, the Delaware, Lackawanna and Western Railroads. The time saved by the new route will be at least two days over the present method of sending coal to New York and Philadelphia, and shipping to the East by vessel. The New York and New England Railroad reaches all the principal points in New England where coal is distributed, and it was stated by several railroad officials that the Lehigh and Hudson River and the New York and New England companies would make rates, owing to the saving in time, to meet and perhaps beat those by the other route. The advantages to shippers offered by the new roads is in quickness of delivery and avoiding the waste that occurs in the frequent handling of coal. For local traffic the company will depend largely upon the mines, forty of which are already opened along its immediate line, and new ones are being discovered every week. The prospect for passenger travel is also good, the road being practically a straight line from Harrisburg to Newburgh, and having two connections with Philadelphia.

The Lehigh and Hudson River Railroad has been built on what was the route of the post riders and other messengers that passed between Newburgh and Trenton, and Philadelphia in the time of the Revolutionary war. The route is a natural pass through the mountains, and was the the only inland path between the Upper Hudson and the Delaware. It was much used when the British occupied the lower portion of the former river by the messengers of Washington, and it was on this route, at the furnaces and forges which even then existed at Andover, N. J., that supplies of iron were obtained and made into steel for the manufacture of arms for Washington's army. The Marquis de Chastellux, a Major-General in the French forces, who served under the Count de Rochambeau, published a work on his return to France immediately after the revolution, in which he described a journey on horseback by this route in December, 1782, from the headquarters of Washington at Newburgh to Belvidere, N. J., and Easton and Bethlehem, Penn., by way of Chester, Warwick, the Sussex Court House, (which was then at what is now known as Johnsonburg), and Moravian Mill, (now Hope), nine miles east of Belvidere. It took the Marquis three days and a half to make the trip, but it is needless to say that the railroad officers made it in a few hours.

"Isn't this shirred bonnet just too sweet for anything?" asked Mrs. Smith of her husband. "I shirred think it was," answered Mr. Smith, as he inspected the bill.—*Unidentified Exchange.*

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	Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per ct	$32,755,400 00	$191,073 17
5 per cent funded loan of 1881, continued at 3½ per cent	491,496,900 00	1,171,032 62
4½ per cent funded loan of 1891	250,000,000 00	2,812,500 00
4 per cent funded loan of 1907	738,909,350 00	4,926,062 33
4 per cent refunding certificates	442,100 00	2,947 33
3 per cent navy pension fund	14,000,000 00	70,000 00
Aggregate of debt bearing interest	$1,437,603,750 00	$9,173,615 45
Interest due and unpaid		1,926,080 07

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837	$57,665 00	$64,174 81
5 per cent. Mexican indemnity stock, 1846-'52	1,104 91	85 74
6 per cent. bonds, 1847-'67	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74	7,000 00	875 00
5 per cent. bonds, of 1860-'71	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called	367,000 00	7,740 41
6 per cent. 5-20 bonds, June 1864, called	57,400 00	1,051 87
6 per cent, 5-20 bonds, 1865, called	70,550 00	18,521 11
5 per cent. 10-40 bonds, 1864, called	326,850 00	65,329 92
6 per cent. Consol. bonds, 1865, called	370,200 00	12,198 41
6 per cent. Consol. bonds, 1867, called	874,000 00	111,618 71
6 per cent. Consol. bonds, 1868, called	263,200 00	21,086 51
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880	77,000 00	4,830 00
5 per cent. funded loan 1881, called	955,650 00	12,086 64
Oregon War Debt, March 2, 1861, matured July 1, 1881	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881	573,550 00	15,184 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called	5,456,800 00	73,462 83
6 per cent. loan of March 3, 1863, matured June 30, 1881	164,200 00	5,724 00
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called	2,252,450 00	6,442 08
1-10 to 6 per cent. Treasury notes, prior to 1846	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846	5,900 00	200 60
6 per ct. Treasury notes, 1847	950 00	57 00
3 to 6 per cent. Treasury notes, 1857	1,700 00	99 00
6 per ct. Treasury notes, 1861	3,000 00	364 50
7 3-10 per cent. 3 years' Treasury notes, 1861	16,300 00	1,104 43
5 per cent. 1 year notes, 1863	41,935 00	2,098 $5
5 per cent. 2 year notes, 1863	32,700 00	1,622 30
6 per ct. compound interest notes, 1863-64	219,860 00	44,920 47
7 3-10 per cent. 3 years' Treasury notes, 1864-65	138,850 00	20,422 62
6 per cent. certificates of indebtedness, 1862-63	4,000 00	253 48
4 to 6 per cent. temporary loan, 1864	2,960 00	244 19
3 per cent. certificates, called.	5,000 00	394 31
Aggregate of debt on which Interest has ceased since maturity	$12,472,725 26	$500,251 91

DEBT BEARING NO INTEREST.

Demand notes, 1861-62	$59,595 00	
Legal tender notes, 1862-63	346,681,016 00	
Certificates of Deposit	12,000,000 00	
Coin certificates, 1863	4,992,040 00	
Silver certificates, 1878	69,440,210 00	
Unclaimed interest		5,339 96
Fractional currency, 1862, 1863 and 1864 $15,408,000 77		
Less amount estimated as lost or destroyed, act of June, 21, 1879 8,375,934 00		
	7,032,066 77	
Aggregate of debt bearing no interest	$440,204,927 77	$5,339 96

RECAPITULATION.

	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	$32,755,400 00	
Bonds at 5 per cent, continued at 3½ per cent.	401,496,900 00	
Bonds at 4½ per cent.	250,000,000 00	
Bonds at 4 per cent.	438,909,350 00	
Refunding certificates	442,100 00	
Navy pension fund, 3 p.c	14,000,000 00	
	$1,437,603,750 00	$11,099,695 52
Debt on which interest has ceased since maturity.	12,472,725 26	500,251 91
Debt bearing no int., viz:		
Old demand and legal-tender notes	$346,740,611 00	
Certificates of deposit	12,000,000 00	
Coin & silver certificates.	74,432,250 00	
Fractional currency	7,032,066 77	
	$440,204,927 77	
Unclaimed interest		5,339 96
	$1,890,281,403 03	$11,605,287 39
Total debt, principal and interest to date, including interest due and unpaid	$1,901,886,690 42	

AMOUNT IN TREASURY.

Interest due and unpaid		$1,926,080 07
Debt on which interest has ceased		12,472,725 26
Interest thereon		500,251 91
Gold and silver certificates		74,432,250 00
U. S. notes held for redemption of certificates of deposit		12,000,000 00
Cash balance available Sept. 1, 1882		141,629,211 22
		$242,960,518 46
Debt, less am't in Treas'y Sept. 1, 1882	$1,658,926,171 96	
Debt, less am't in Treasury Aug. 1, 1882	1,675,054,433 20	
Decrease of debt during the month		$16,128,261 24
Decrease of debt since June 30, 1882		$29,988,288 76

BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.

	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64	$25,885,120 00	$258,851 20
Kansas Pacific bonds, 1862-64	6,303,000 00	63,030 00
Union Pacific bonds, 1862-64	27,236,512 00	272,365 12
Cent. Branch Union Pacific bonds, 1862-64	1,600,000 00	16,000 00
West'n Pacific Bonds, 1862-64	1,970,560 00	19,705 60
Sioux City & Pacific bonds, 1862-64	1,628,320 00	16,283 20
Totals	$64,623,512 00	$646,235 12

Interest paid by the United States, $55,344,682.74; interest repaid by transportation of mails, &c., $15,221,035.61; interest repaid by cash payments: 5 per cent net earnings, $655,198.87; balance of interest paid by United States, $39,468,448.26.

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, August 31, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

An Improved Steering Gear.

MR. JOHN GORMAN, of Philadelphia, has invented a valuable improvement on the ordinary ship's tiller and steering gear. It is a very common experience that the "send" of the sea in heavy weather often puts such a sudden strain on the tiller-ropes of a large ship as to snap them and leave the ship unmanageable at a most critical and dangerous moment. The "play" of the rudder and tiller causes this difficulty, and Mr. Gorman's invention consists of a combination of wheel and pinion, with springs in the yoke of the rudder-head, so arranged that, although the rudder will give slightly, when struck, it will at once return to its place without transmitting any strain to the tiller-ropes or steering gear. It is a complete lock against such an accident as the parting of the wheel-ropes from a shock on the rudder, and against the other danger to the helmsmen of being thrown under or over the wheel. Mr. Gorman is an employé of the Edison Electric Light Company, but lacks capital for the development of his invention, which has received the approval of a great many experienced practical seamen.

THE Cairo and St. Louis Railway Company have constructed at Cairo, Ill., what is termed a "declinator." It is for the purpose of loading bulk grain into barges from cars. The cars are run into the large river warehouse of the road, and the grain is dropped through the floor into barges faster than it could be handled by an elevator.

MESSRS. L. R. HAMMERSLEY Co., & of Philadelphia, will shortly publish "A Chronological History of Steam Navigation," by Rear Admiral George H. Preble, U. S. N. This is a compilation of a series of articles styled "Notes for a History of Steam Navigation," which have appeared in the "United Service" magazine, and which have been revised and rearranged. We have found the notes interesting and full of information, and the book itself cannot fail to be of great interest to many of our readers.

THE Harlan and Hollingsworth Company, Wilmington, Del., are building a fine steamer for the Eastern Shore Steamboat Company, which it is expected will be placed on the line early next spring. Her measurements are: length, 175 feet; breadth of beam, 85 feet; and depth of hold, 10 feet 6 inches. Her freight capacity will be much larger than any of the other boats belonging to the company, and her passenger accommodations will be first-class. She will be commanded by Captain George A. Rogers.

THE steamship "Queen of the Pacific' arrived at San Luis Obispo on the 22d ult., with a cargo of steel rails for the Pacific Coast Railroad. She left Philadelphia June 7th; arrived at Rio June 28th; at Valparaiso July 27th; left the latter port August 3d, making 5,000 miles in sixteen days and twenty-two hours. Her running time from Philadelphia was fifty-two days, having been delayed at Rio, Straits of Magellan and Valparaiso from the machinery not working well. She is a model of perfection in every particular, and the finest American steamship afloat. She is supplied throughout with the electric light and many other modern improvements, far eclipsing any ship that ever sailed in Pacific waters. After discharging her cargo she sailed for San Francisco.

A NEW speed register for railway trains, invented by John C. Henry, was recently tried on the Kansas City, Fort Scott and Gulf road. One of the machines was placed on the engine and one in the car. It consists of a dial like that of a steam gauge, with an index which marks the increase or decrease of speed, and a registering instrument something like the anemometer used by the signal service for registering the velocity and direction of the wind. This register is furnished with a coil of paper divided into squares by lines, those running lengthwise showing the height of speed, and the transverse lines dividing the record off into miles. Mr. Henry claims that it affords a complete check by indicating to the engineer at all times just how fast his train is running, and making a record of same for the inspection of the road officials.

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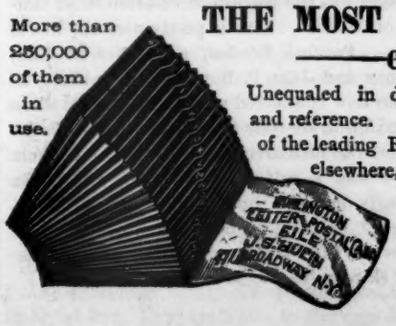

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Tunnels Beneath Rivers.

THE following is an extract from the address of John Fowler, president of the Mechanical Science Section:—

"Tunnels under broad navigable rivers and estuaries have been a subject of discussion by engineers for at least a century, but the only one at present completed is the unfortunat and costly Thames tunnel. Two importants works of the class are, however, now well in hand—namely, the Severn tunnel at Portskewet and the Mersey tunnel at Liverpool. One lesson enforced by the Thames tunnel was the necessity of leaving a reasonable thickness of ground between the water and the tunnel. In the Severn tunnel the maximum thickness is 40 feet, and in the Mersey tunnel 22 feet. The width of the river at the point of crossing of the former tunnel is 2¼ miles and the maximum depth of the rails below high water 163 feet. In the case of the Mersey tunnel the width is nearly three-quarters of a mile and the depth 144 feet. The Thames tunnel, as almost every one knows, was carried on by means of a special contrivance termed by Brunel a "shield." No special appliances have been adopted in the case either of the Severn or the Mersey tunnel. Both are driven in the ordinary way, but, of course, enormous pumping power is required and has been provided. Where no special appliances are used in the construction of a subaqueous tunnel, it will be clear that unknown risk is encountered. All may go well, and the engineer will then justly receive congratulations from every one for his boldness and success. But, on the other hand, something may go wrong, even at the last moment, and the engineer then would be abused by the unthinking public for his temerity and consequent failure. In many cases of tunnels under estuaries, special appliances could be used which would obviate all risk and make the successful completion of the work a mathematical certainty.

"A tunnel over a mile in length, now in progress under the Hudson River at New York, is being driven through a silty stratum by the aid of compressed air, and with a certain amount of success, as only some 20 men have been drowned up to the present time. The principle upon which the compressed air is used is, however, a false one, since it is merely forced into the tunnel with a view to uphold the ground by its pressure, like so much timbering, and not to keep out the water on the principle of a diving-bell. It is clear, therefore, that the completion of the Hudson River tunnel, if the present system be persevered in, is purely a matter of conjecture, and all we can do is to hope for the best. The same remark applies, of course, to the Severn tunnel and the Mersey tunnel, although in those cases the character of the ground is such that the contingencies are small in comparison with those encountered in the construction of the Thames tunnel and the Hudson River tunnel. Nevertheless, unless special appliances of the nature of the pneumatic process be used, a subaqueous tunnel, whether it be the Channel tunnel itself or one but a few yards in length, must necessarily present an unknown risk. The prototype of all these tunnels is the one commenced at Rotherhithe in 1809, which was successfully driven a distance of 900 feet under the Thames, and failed when within little more than 100 feet of the opposite shore.

'A tunnel about one and a half miles in length was commenced about 10 years ago under the Detroit River in America, but was abandoned in a similar manner. So far good fortune has attended both the Severn and the Mersey tunnels, and there is, I am glad to say, every chance of its continuing. Only a few months ago I became aware of the fact that a scheme identical in all its main features with my Humber tunnel project had been suggested for adoption in the case of the Thames tunnel, in lieu of the plan proposed by Brunel. Fifty-nine years ago a working smith named Johnson proposed to construct the Thames tunnel without coffer-dams by making it in parts, 28 feet in length, each length having the ends temporarily stopped up, and being constructed on the same principle as the diving-bell. If another tunnel be constructed under the Thames, which is far from improbable, as the requirements of below-bridge traffic necessitate some such means of communication, it will be built in accordance with the plan suggested 59 years ago by the working smith, and not on that of Brunel's Thames tunnel, or of any other tunnel yet carried out."

Measurement of the Great Lakes.

THE following measurements of the great lakes have been taken by Government surveyors: The greatest length of Lake Superior is 335 miles, its greatest breadth is 160 miles; mean depth, 688 feet; elevation, 827 feet; area, 82,000 square miles. The greatest length of Lake Michigan is 300 miles; its greatest breadth, 108 miles; mean depth, 690 feet; elevation, 506 feet; area, 23,000 square miles. The greatest length of Lake Huron is 300 miles; its greatest breadth is 60 miles; mean depth, 600 feet; elevation, 274 feet; area, 20,000 square miles. The greatest length of Lake Erie is 250 miles; its greatest breadth is 80 miles; its mean depth is 84 feet; elevation, 261 feet; area, 6,000 square miles. The greatest length of Lake Ontario is 180 miles; its greatest breadth is 65 miles; its mean depth is 500 feet; elevation, 261 feet; area, 6,000 square miles. The total of all five is 1,265 miles, covering an area of upward of 135,000 square miles.

THE Austin *Siftings*, in its comic history of Texas, says that in the old colonial days "there was very little money in Texas. Cattle were the circulating medium of the country. A year-old steer was the basis of circulation in all matters of trade." This is pretty near the literal truth. Paschal Borden, a brother of Gail, Thomas and John P. Borden, once told a gentleman now connected with the *News* that when he and his bride rode to the parsonage of Padre Muldoon to be married they drove before them a cow and a calf as the fee of the priest. In the early days of Virginia tobacco was the medium of exchange, and in some of the new States of the West it used to be said that raccoon skins were a legal tender.

No Dogs Allowed on the Cars.

IT happened the other day on the D. & H. C. Co. Railway. The train had just left Albany and the conductor was making his first round, when he observed a small white dog with a bushy tail and bright black eyes sitting cosily on the seat beside a young lady so handsome that it made his heart roll over like a lopsided pumpkin. But duty was duty, and he remarked in his most deprecatory manner:

"I am very sorry, madam, but it's against the rules to have dogs in the passenger cars."

"Oh! my? is that so," and she turned up two lovely brown eyes at him beseechingly. "What in the world will I do? I can't throw him away. He's a birthday present from my aunt."

"By no means, miss. We'll put him in the baggage car, and he'll be just as happy as a robin in spring."

"What, put my nice dog in a baggage car?"

"I'm awful sorry, miss, I do assure you, but the rules of this company are as inflexible as the laws of the Medes and them other fellows, you know. He shall have my overcoat to lie on, and the brakeman shall give him grub and water every time he opens his mouth."

"I jest think it's awful mean, so I do; and I know somebody will steal it, so they will," and she showed a half notion to cry that nearly broke the conductor's heart, but he was firm, and sang out to the brakemen, who was playing a solo on the stove:—

"Here, Andy, take this dog over into the baggage car, and tell Dudley to take just the best kind of care of him."

The young lady pouted, but the brakeman reached over and picked the dog up as tenderly as though it was a two weeks' old baby, but as he did so a strange expression came over his face, and he said hastily to the conductor:

"Here, you just hold him a minute till I put this poker away," and he trotted out at the car door and held on to the brake wheel, shaking like a man with the ague.

The conductor no sooner had his hands on the dog than he looked around for a hole to fall through.

"Wh-wh-why, this is a worsted dog!"

"Yes sir," said the little miss, demurely. "Didn't you know that?"

"No, I'm most awful sorry to say that I didn't know that;" and he laid the Christmas dog down in the owner's lap and walked out on the platform, where he stood half an hour in the cold trying to think of a hymn-tune to suit the worst sold man we ever saw on the D. & H. C. Co.'s road.—*Cincinnati Commercial.*

MORSE, who invented the telegraph, and Bell, the inventor of the telephone, both had deaf-mute wives, which leads a wag to observe: "Just see what a man can do when everything is quiet."

A CHARTER has been granted for a bridge over the Monongahela River at Pittsburgh that is to be 1,174 feet in length. The framework will be of wrought iron, and will be supported by steel wire cables 2½ inches in diameter. It will have a double roadway 18 feet wide, and sidewalks for foot passengers.